

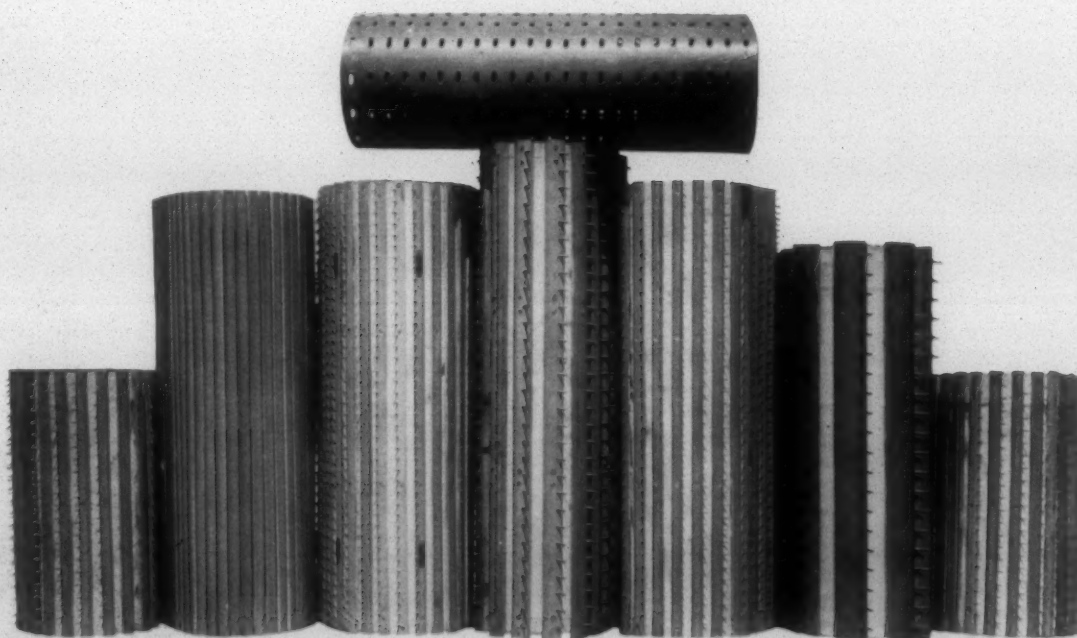
TEXTILE BULLETIN

VOL. 63

JANUARY 15, 1943

NO. 10

Thorough Cleaning
of the cotton
is the first step toward good yarn



PICKER APRONS Are An Important Part of Preparatory Machinery

It pays, therefore, to equip your pickers with aprons that are made of
QUALITY MATERIALS by experienced workman . . . made STURDY
and STRONG to stand the gaff of today's high speed production demands

OUR TEXTILE APRONS MEET THOSE SPECIFICATIONS

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BEST!—***

in guns, and ships,
and tanks and planes—
and **CLOTHING** too

Nothing is too good for the men who are serving in the armed forces of our country and it is important that all fabrics used for military purposes measure up to the same high standard as the weapons with which they are fighting.

But no textile mill can make high quality fabrics from inferior yarns. And inferior yarn quality is often due to defective travelers.

U. S. Ring Travelers are the most dependable, the most uniform in weight and temper, that technical craftsmanship can produce. They will contribute, more than any other single factor, to a quality product in your mill, and at the same time will save you money.



Free Samples on Request

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Providence, R. I.

Greenville, S. C.

A Traveler for Every Fibre

Published Semi-Monthly by Clark Publishing Company, 218 W. Morehead St., Charlotte, N. C. Subscription \$1.50 per year in advance. Entered as second-class mail matter March 2, 1911, at Postoffice, Charlotte, N. C., under Act of Congress, March 2, 1897.

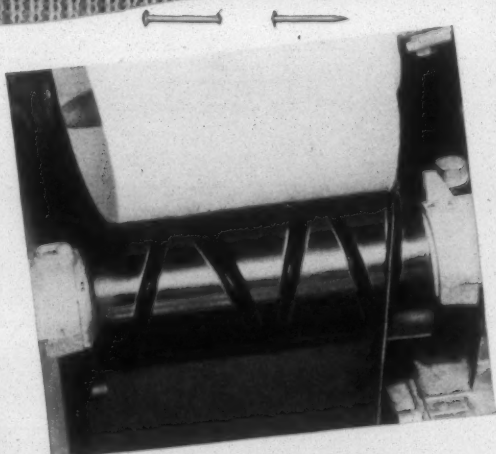
Coning that Makes Money and Delights Customers

The advantage enjoyed by mills operating Roto-Coners* under wartime hardships . . . makes it likely that when the war is over, more and more open-wound knitting cones will be Roto-Cones*. Higher production per spindle with resultant lower-

ing of winding costs . . . plus assurance of uniformly high-quality cones . . . have convinced many mills that their plans for the post-war future should include additional installations of the truly modern drum winder, the Roto-Coner*.

Universal Winding Company

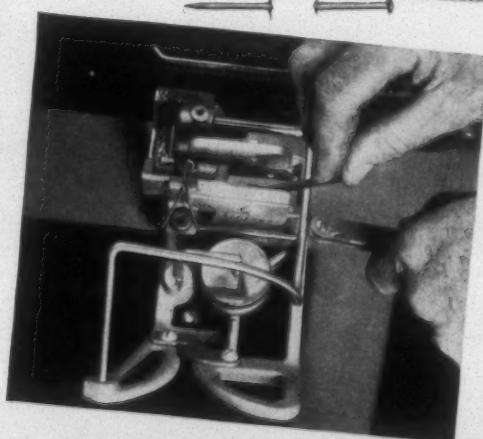
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FAST, CONTINUOUS OPERATION

The Rotating Traverse is a combination driving drum and grooved traversing device. By taking the place of cams and reciprocating parts, it permits much higher winding speeds and also eliminates stops for repairs or replacement of quick-wearing parts. The absence of cams also means that no greasing is necessary. Since practically all moving parts are enclosed and automatically lubricated, maintenance is no problem.

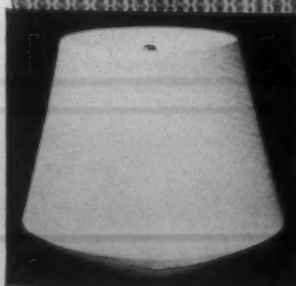
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ERROR-PROOF YARN INSPECTION

The Precision Slub Catcher has a patented feature which equalizes the slubbing blades, making it possible to obtain uniform settings on all spindles—without the chance of error due to an operator's "feel". A unique locking arrangement holds the blades securely in a parallel position. Soft-twisted knitting yarns and yarns for dyeing are thus inspected under a uniform control and reach the consumer free from unacceptable imperfections.

* REG. U. S. PAT. OFF.



ROTO-CONER



Open-Wind Cones for Knitting

WARPING CONES DYEING PACKAGES PARALLEL FILLS FOR TWISTING



REALISTICALLY speaking it is no secret that we can make little or no textile machinery now, because strategic metals must be diverted for more urgent purposes. Rhetorically speaking, you may "ask Russia", if you want to know one reason for our inactivity in the textile industry. The photograph herewith shows a roomful of Semi-Automatic Hydra-Feed lathes, destined for the Soviet, that we are making under a U. S. Ordnance Lend-Lease contract.

It's a far cry from textile machinery to machine tools, which fact speaks volumes for the flexibility of our engineering and manufacturing facilities.

After the war these facilities will again be devoted to making more and better textile equipment than ever. In the meantime our services to you are necessarily restricted to supplying repair parts, keeping your machines in running order and helping you to plan for the future.

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Better Way to Move War Goods

THE Barber-Colman system of Spooling and Warping embodies a number of features which are contributing materially toward better results in the war effort. Most of these have to do with efficient handling of materials and with conservation of the operator's energy. For instance, the picture shows the trident transfer table, located between the Automatic Spooler and the Super-Speed Warper. Cheeses from the spooler are placed on tridents which are then slid onto the roller-top trans-

fer table by an easy push. No heavy lifting is necessary and the material is moved quickly with a minimum of effort. Other features include convenient bobbin storage bins, easy-running trident trucks, handy arrangements for creeling, self-threading drop wires, and a special comb to speed up creeling-in time. With a premium on the efficient production of war goods, mills having Barber-Colman equipment are fortunately situated to keep up with high standards of quality and large volume demands.

For Example . . .

The following production figures show results being obtained in a prominent mill running medium counts for two-ply twills used in uniforms and other similar military cotton goods.

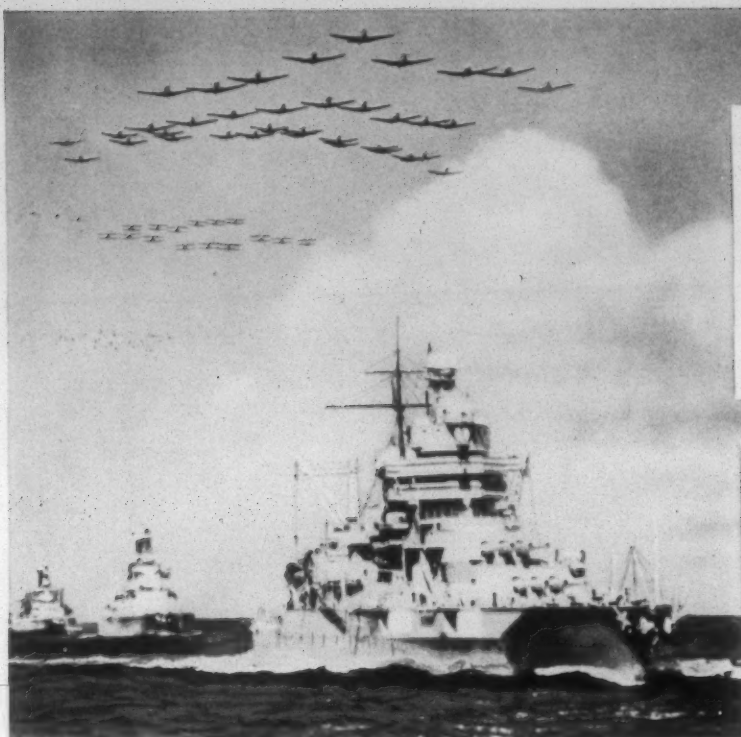
Count	20s
Ring	2 1/4"
Traverse	7 3/4"
Pounds per hour per Spooler	490
Beams per Cheese	2
Yards per Beam	20,000

AUTOMATIC SPOOLERS • SUPER-SPEED WARPERS • WARP TYING MACHINES • TWISTER CREELS • MOISTURE CONTENT CONTROLS

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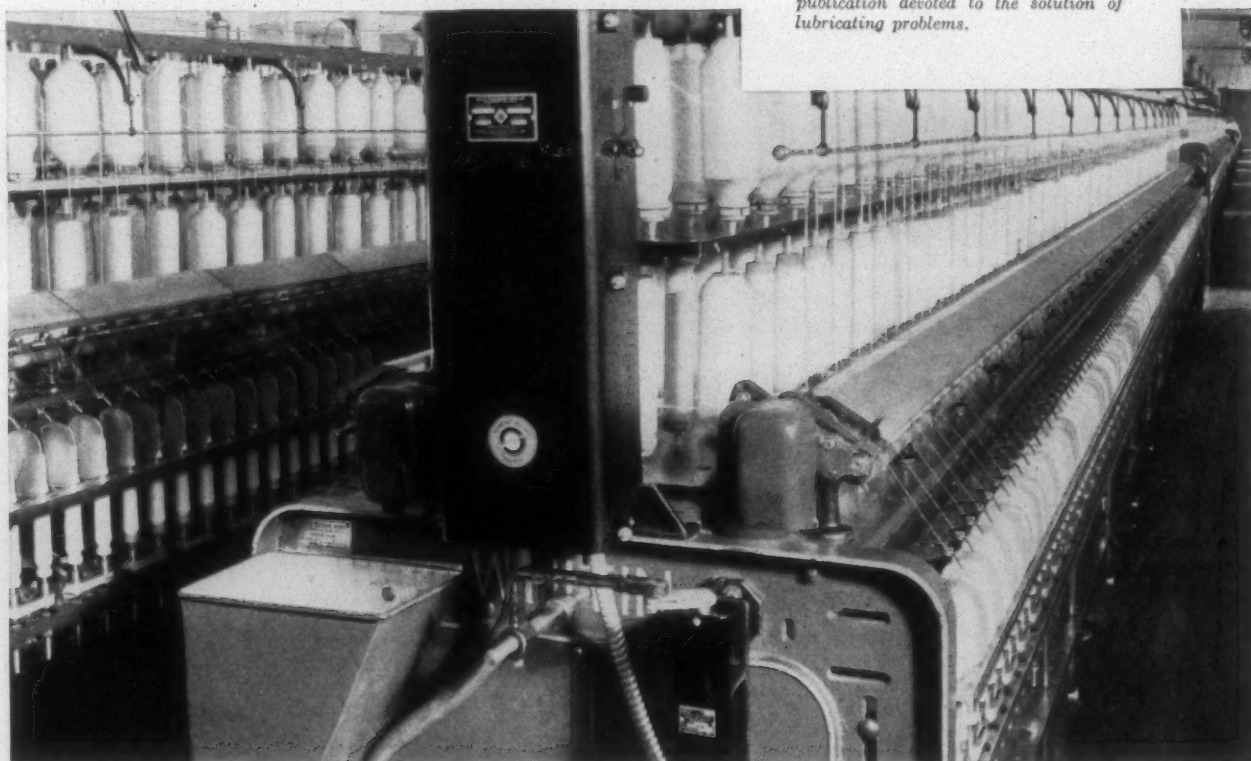
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POWER IN THE SOUTH

By JUSTIN R. WHITING
in Southern Agriculturist

THE SOUTH is coming into its own in this war period because of its temperature and abundant natural resources. Hundreds of millions of dollars are flowing into this vast area for the purpose of building Army and Navy bases and war plants. The military facilities are of all kinds with special emphasis on aviation. The industrial development is equally diversified. Ships of many types are being built along the Southern seaboard; while production of such minerals as aluminum, magnesium, iron and coal and the manufacture of textiles, guns, munitions, aircraft and other military material constitutes an important part of the nation's war program.

Some of this activity is temporary; much of it is permanent. To the student of economics, it is clear that the South's war enterprise means something constructive after the war. The economic forces now moving in the Southern states will continue to strengthen and develop this section in time of peace.

The basic ingredient in this expansion is electric power. This isn't a dramatic product, like tanks or airplanes or warships. You can't even see it in a picture, like oil or steel or powder. But it is a war material as strategic as it is invisible. This is the age of electric-powered industry at a time when industry is being called upon for a volume of output beyond anything than the world has known. Fortunately for an America at war, this country's electric power resources have multiplied more than five times since the last war in 1917. Generating capacity in that earlier year amounted to about 9,000,000 kilowatts; today it amounts to 47,500,000.

Power and the Axis

We do not know exactly what the development of electric power has been in Germany, Italy and Japan, except that it has been large. An intensive effort to increase the supply of electricity was an essential part of Germany's preparations for war, beginning in 1935. According to Chairman Leland Olds of the Federal Power Commission, Germany can command, or will be commanding very shortly, about 100,000,000,000 kilowatt hours of electric energy of its own, as against a total of 144,000,000,000 kilowatt hours for this country. In addition to its own

power supply, Germany has been able to annex by force the power development of the conquered countries, amounting to a probable total of another 100,000,000,000 kilowatt hours. The power of Germany and its satellites, however, does not equal that of the United States and its Allies.

The record of the Commonwealth and Southern companies in the South is an illustration of America's power program. About 20 years ago these companies began to extend their lines so as to bring electric energy to the farm lands in their territory. By reason of their common ownership, these companies were able to inter-connect and co-ordinate their power facilities so as to supply electric service in an area where otherwise there were too few customers to justify it. This enabled the Commonwealth and Southern companies to do important pioneering work in numerous Southern communities.

Today these companies—Alabama Power, Georgia Power, Gulf Power, Mississippi Power and South Carolina Power—serve about half a million electric customers, of whom about 140,000 are rural customers. In addition, these companies are supplying energy for most of the lines set up by the Rural Electrification Administration during recent years.

A Fine War Service

The pattern of integrated operation established by these companies in peace time has served the country well in war. Beginning at the outbreak of the war in Europe in 1939, these companies began a major construction program in the South, with the result that for the 12 months ended Aug. 31, 1942, their electric output was 5,870,000,000 kilowatt hours, which is an increase of 30 per cent during the past two years.

It is easy to see what this means to the nation in this war, where production is of such importance. It requires only a little imagination to realize what it will mean to the South after the war. Equipped with adequate electric power, free enterprise in the South—whether it is the free enterprise of the industrialist or the free enterprise of the farmer—has a great future ahead of it. There is only one

(Continued on Page 52)

The Textile Manpower Problem—And What's Being Done About It

By JAMES T. McADEN, Associate Editor

MANPOWER, or to use the strictly everyday, non-Washington term for it—labor supply—has become the textile industry's greatest wartime problem. If the problem was confined to just the textile mills a solution might be found by drawing surplus workers from other industries. But that can't be done, obviously because other businesses face the same trouble to just as great an extent.

The war effort has made huge demands upon the textile industry, both in increased production and workers called into service. Mills with war orders have been asked by the Army and Navy to run three shifts, speed up machines in order to fill contract after contract; the mills have been able to meet these Government orders despite

the fact that their labor turnover has been terrific. Proof that the Government has been satisfied is shown in the number of Army-Navy "E" awards given mills for excellence in producing materials for the armed services.

Government Programs

Textile industry executives, with many employees now in various branches of the Army and Navy, have been forced to take substitutes—inexperienced workers, women workers—and if these are not to be had, make the best use of what labor there is on hand. Government agency programs of the War Production Board and the War Manpower Commission have been offered to employers as a means of getting the most out of the labor supply on hand. Another organization, the National Safety Council, has done an excellent job in preaching the fact that the best worker is the safe worker.

If the chief of the still embryonic War Manpower Commission, Paul McNutt, is to have his way, here's what can be expected in the future:

Within an estimated three months some plan of manpower control, job-freezing if necessary, will be in effect in every major manufacturing community. Purposes of manpower control are to (1) protect war production from the disruption caused by unnecessary switching of jobs; (2) help each war plant make the best use of workers on hand and help workers use their highest skills; (3) prevent the influx of workers to areas where they cannot be absorbed because of living conditions; and (4) provide adequate recruiting, training and upgrading programs for workers.

Committees To Be Organized

The first step in each industrial community will be the appointment of an area director to represent the WMC. This director will then organize a committee of labor and industrial leaders in the community. This area war manpower committee will meet and draw up a program for stabilizing employment according to the peculiar needs. This program is intended to control the transfer of workers from one job to another in the 35 industries or activities which the WMC has designated as essential. Just how this will work for the Southern textile industry is not yet clear. The textile industry has been deemed essential, but in most cases a textile manufacturing concern is the



The best use must be made of every worker.



THERE'S NO SHORT CUT TO KNOW-HOW!

DAYCO TEMPERED ROLL COVERINGS PIONEERED, ENGINEERED AND PROVED BY ACTUAL MILL SERVICE

1. Improved drafting.
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Any grizzled top-kick will tell you there's no short cut to know-how.

But, today, there may be attempts made to find an easy short cut to the know-how of producing synthetics.

However, know-how means learning through years of experience. And there is no short cut to it.

When in 1938, Dayton Synthetic Rubber Textile Products were introduced to set a new standard of durability and performance for an exacting industry, they climaxed Dayton's

years of development and pioneering synthetic materials for printer's rollers, tires and industrial V-Belts.

So the current trend to synthetics finds Dayton ready and able to apply its broad peace-time background of technical and manufacturing experience in the development of synthetics to the wartime needs and requirements of America's military and industrial needs.

THE DAYTON RUBBER MFG. CO.
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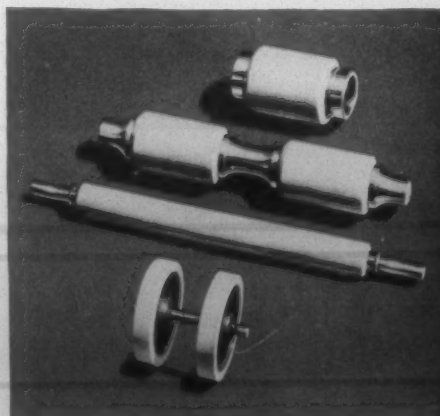
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one big business in the community where it is located. There will be little interchanging of workers from one industry in the town to another, but mostly from one area to another. Thus the Southern textile industry's problem in this respect will have to be dealt with from a national rather than a local viewpoint.

The War Manpower Commission had this to say recently: "Where agreements stabilizing employment in a community or area have already been worked out by employers without WMC participation or supervision, such agreements will not be recognized by the commission and the participants will be told that continuance of such agreements is contrary to war manpower policy." That statement, so boldly put, seems to penalize any group which has beat Uncle Sam to the draw in attempting to solve the problem. In other words, the WMC is determined to have its finger in every manpower pie.

More Women Workers

McNutt said recently that "Soon one out of every four workers in American war production industries will be a woman." That drew a chuckle from textile men in an industry which long had nearly 50 per cent of payrolls made up of women. Spinners have used even more women. But it does mean that more and more women will have to be hired and taught jobs which men formerly held. In the knitting industry, where the small number of men employees are usually in positions of higher responsibility, women will have to be used to take the place of men called into service.

All during the past year war plants were troubled with what public speakers term as *absenteeism*. That expensive word can easily be defined as laying out, not loafing on the job, but loafing off the job. Superintendents have found that this practice shows an increase just after payday, during hunting seasons. Poor transportation and lack



More and more women employees will be used.

of suitable housing have been other reasons.

Aside from the fact that workers now have more money than in pre-war days, the root of the problem goes back even farther. Employers and employees have seen too little of each other. Softball leagues and mill community houses have been great assets, but these do not take the place of ordinary friendliness. Creation of a friendly atmosphere between labor and management, plus the maintenance of discipline in the mill, have been cramped because the employer had not appealed directly to his employees for fear of being haled into court. Firing the lax employee accomplishes little more than reducing the already short labor supply by one man.

War Production Drive Groups

One way of increasing worker morale and making the employees more conscious of their part in the program of supplying the fighting front is that of labor-management war production drive committees. These groups are being sponsored by Donald Nelson's War Production Board. Already some war production drive committees have been set up in Southern textile mills. From these committees come suggestions which not only save manpower but also make possible faster production and better quality output. Employees are publicly cited for the suggestions they contribute.

War production drive committees remind workers that their efforts on the home front are necessary to the success of the fighting front by making labor an important part of planning. There is another method of making it possible for the mill employees to visualize the importance of their efforts, and that is through publicity.

Publicity, in mill posters and company newspapers, can explain just how the mill products are used for war purposes. The Southern Combed Yarn Spinners Association arranged a display of the uses of combed yarn products in the war effort, and it was shown in each combed yarn town. The Cotton-Textile Institute arranged a similar exhibit of textiles' part in the war. The recently-concluded Army War Show used the same idea on a much larger scale. Through the use of smaller and appropriate exhibits in each mill with war contracts, workers will realize more easily that they no longer have purely civilian jobs.

Training Within Industry

A valuable production aid is the Job Instructor Training Program offered by the Training Within Industry Division of the War Manpower Commission. *Time* magazine thus reported on the program:

"Messrs. Channing Dooley, formerly of Socony-Vacuum Oil, and Walter Dietz, formerly of Western Electric, are not Washington headliners. Charged with running the Training Within Industry program of the War Manpower Commission, their names have been conspicuously absent from all the discussion and argument of the manpower shortage. Nevertheless, Messrs. Dooley and Dietz have been doing a job and a big one.

"The job is to help industry help itself in training new recruits and upgrading men more experienced into still more responsible jobs. Two years ago they began with only seven first-rate instructors. These seven trained



High grade gas, by-product and steam coal from Wise County, Va., on the Interstate Railroad.



High grade gas, by-product, steam and domestic coal from Wise County, Va., on the Interstate Railroad.



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High grade gas, by-product, steam and domestic coal—Pittsburgh seam from Irwin Basin, Westmoreland County, Pennsylvania, on the Penna. Railroad.



Genuine Third Vein Pocahontas from McDowell County, W. Va., on the Norfolk & Western Railroad.



Genuine New River Smokeless, Beckley or Sewell seam from Raleigh County, W. Va., C. & O. and Virginian Railroads.



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Steam and domestic coals from a number of producing districts.

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other instructors who in turn went out and taught foremen how to educate men under them to work faster, or to move up to more complicated jobs.

"Examples of Dooley-Dietz successes:

"Everybody said it takes two weeks to train a new loom tender to tie a weaver's knot. Dooley and Dietz did not believe it. They went to a New England mill loaded with war orders and hard-pressed to find workers. The manager sent for the best loom-tender in the plant. He showed the visitors, with lightning movements of his hands, how a good man does it. Gradually they slowed him down to a speed the eye could follow, made him analyze what each finger does. Hours later they knew exactly what happens when the fingers fly. Then they called in a man from the accounting department. In 20 minutes they had him expertly tying weaver's knots.

"A percher (textile for inspector) is getting hard to find and it took a month to train a new man to spot all the possible defects in cloth as it comes off the looms. Dooley and Dietz bet they could reduce the month to a half a day. They had the management get samples of all possible defects. They sewed the samples into a strip 75 yards long and put it on rollers. Then they had the No. 1 inspector teach them what to look for. They analyzed and sent for a green man. After watching the roll go by

a few times he was calling the errors correctly. Dooley cherishes a letter which came in a few weeks later. Triumphant, the manager reported Dooley was wrong; experience showed it took a whole day, not just half a day, to bring a new man up to a level of reliability."

Set-up of Training Program

Training Within Industry is especially geared to provide training for superintendents and overseers, who in turn develop efficient labor. Each job instructor is taught how to pass on his "know how" to workers who "don't know how." He learns to break down jobs into simple steps or operations, which he explains, demonstrates, asks the new employee to perform first under supervision and then on his own, explaining to the instructor what he is doing and why.

But job instruction is not all there is to supervisory training. In order to direct the work of a group of people, a supervisor should know processes, operations, materials, and machines; that is, he should know the practical background of the job itself. Also he seeks to know just what responsibilities are his as a representative of the mill's management.

Equally important are two other skills the supervisor must have: the skill of planning and the skill of getting co-operation from people.

More than 6,500 war production plants in which approximately six million men and women are at work have thus far been serviced with the Job Instructor Training program.

More than 335,000 supervisors, industrial foremen and others have been certified as instructors, and the goal set for 1942 was reached.

The Washington headquarters of TWI has set up 22 district offices under the direction of high-ranking production men loaned by industry. Field work is done by training consultants who serve on a part-time basis entirely as unpaid volunteers. There are also staff training specialists, full-timed and salaried. The clerical forces in the field offices are paid by the Federal Government.

Offices Serving the Textile South

The Atlantic Central District, which directs the TWI program in Virginia, North Carolina and South Carolina, has headquarters in the Raleigh Building, Fayetteville and Hargett Streets, Raleigh, N. C. The Southeastern District, which includes Georgia, Florida, Alabama, Mississippi, central and eastern Tennessee, is located at the Georgia School of Technology, 225 North Avenue, N.W., Atlanta, Ga.

In the Atlantic Central District 190 war production trainers are available, and to date 5,225 war production instructors have been certified. Two hundred trainers are available in the Southeastern District, where 7,487 instructors have been certified.

In order to get a TWI program started it is only necessary for a mill to get in touch with the proper district office, and a representative will be sent to complete arrangements.

Job instructor training is carried out by trainers free of charge. Those who are to be trained as instructors are

(Continued on Page 54)

LABOR SUPPLY ROUND-UP

The latest War Manpower Commission list of urban areas in which there are current labor shortages, balanced supplies, anticipated balanced supplies and demands, or labor surpluses includes 40 Southern cities in which textiles are manufactured.

The lists are furnished to the War Production Board and Government procurement agencies for guidance in placing war contracts with consideration for manpower factors, and are revised periodically.

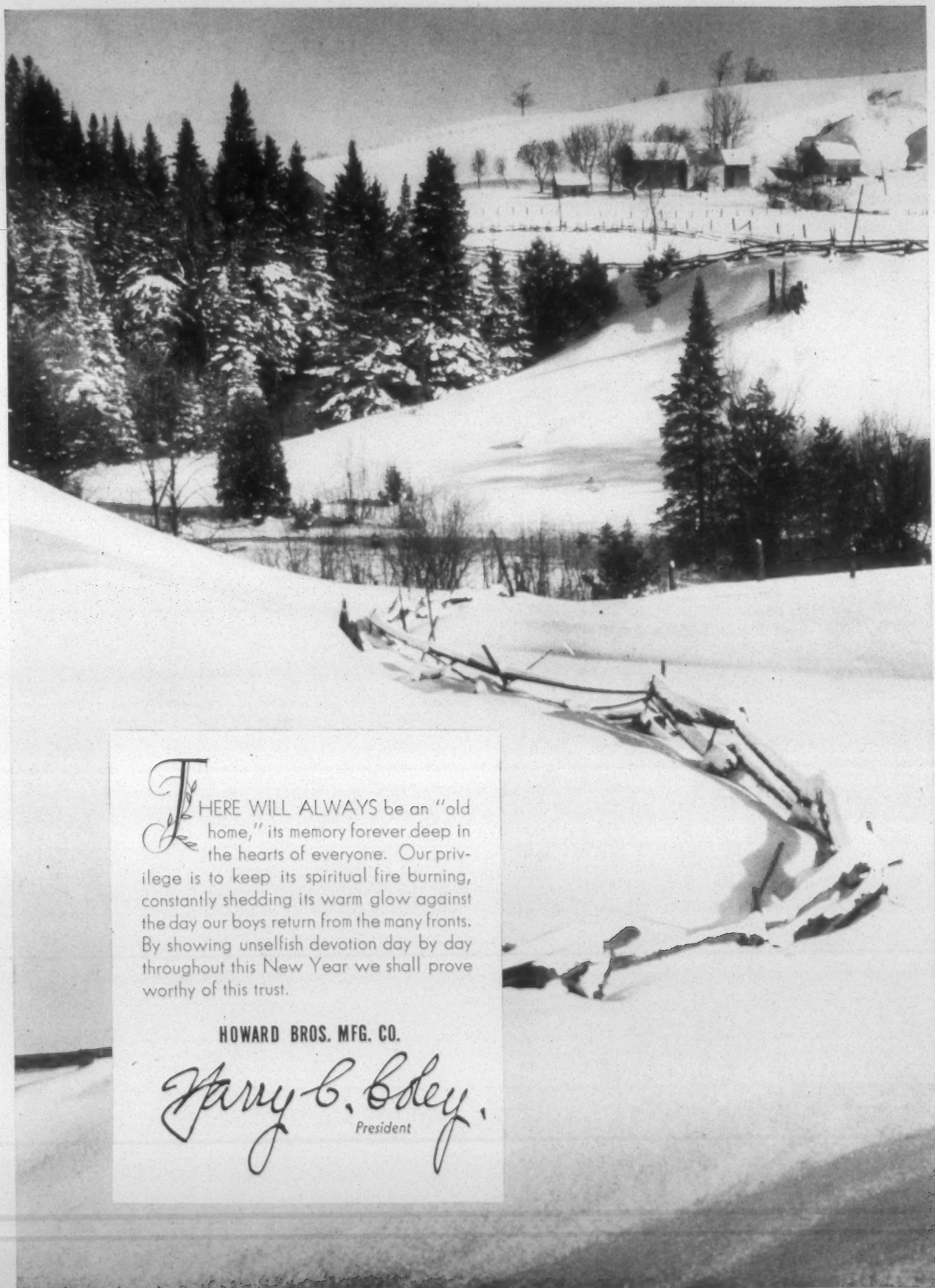
Each labor market area listed includes not only the city named, but also takes in nearby communities which should be grouped together as a natural area.

The areas of most current acute labor shortage are Mobile, Ala.; Macon, Ga.; Pascagoula, Miss.; Elizabeth City, N. C.; and Charleston, S. C.

Areas of current balance of labor supply and demand are Huntsville and Talladega, Ala.; Wilmington, N. C.; Bristol, Tenn.; and Dallas, Tex.

Areas of anticipated balanced labor supply and demand for six months are Florence, Ala.; Atlanta, Ga.; New Orleans, La.; Charlotte, N. C.; Memphis, Tenn.; Houston, San Antonio and Waco, Tex.

Labor surpluses are said to exist in Birmingham and Montgomery, Ala.; Little Rock, Ark.; Augusta, Columbus and Rome, Ga.; Jackson, Miss.; Asheville, Durham, Greensboro, Winston-Salem, and Rocky Mount, N. C.; Columbia and Greenville, S. C.; Chattanooga, Knoxville and Nashville, Tenn.; El Paso, Tex.; Richmond, Roanoke, Danville and Lynchburg, Va.



*T*HERE WILL ALWAYS be an "old home," its memory forever deep in the hearts of everyone. Our privilege is to keep its spiritual fire burning, constantly shedding its warm glow against the day our boys return from the many fronts. By showing unselfish devotion day by day throughout this New Year we shall prove worthy of this trust.

HOWARD BROS. MFG. CO.

Harry C. Boley,
President

Products: Card Clothing for Woolen, Worsted, Cotton, Asbestos, and Silk Cards—Napper Clothing, Brush Clothing, Strickles, Emery Fillets. Top Flats Recovered and extra sets loaned at all plants—Lickerins

and Garnett Cylinders from 4 to 30 inches and Metallic Card Breasts Rewired at Southern Plant—Midgley Patented Hand Stripping Cards, Howard's Special Hand Stripping Cards and Inserted-Eye and Regular Wire Heddles.

PRACTICAL TEXTILE DESIGNING

PART TWO

By THOMAS NELSON
Dean of the Textile School
North Carolina State College, Raleigh

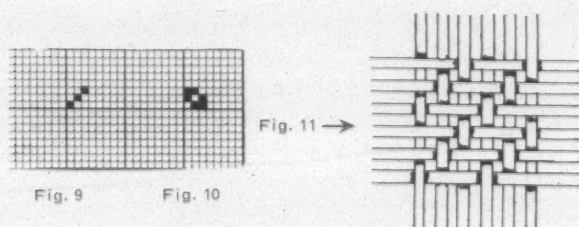
In his first installment presented in the last issue Dean Nelson dealt with the designing of plain weaves and dimities, and in this issue takes up twills. The next article will appear in the Textile Bulletin for Feb. 1.

TWILL WEAVES are formed by interweaving the warp and filling threads with each other in such a manner that diagonal lines are formed in the fabric. These lines can be made to run from right to left or from left to right. Twill weaves can be made on any number

twill. For a left hand twill begin with square at lower right hand corner and advance one square to left hand.

This is the principle on which all twills are constructed, whether on a small or a large number of threads. In making these designs it should always be remembered that the lines must be continuous and unbroken. This point can be better illustrated by using the two up and two down twill, illustrated at Fig. 12.

Mark 4 x 4 empty squares on design paper, then fill in the weave. It is on the last thread and pick that care must be taken so that the line will be continuous and



of threads, from three upwards, the simplest of which is the three harness twill, one up and two down; also the one down and two up.

Fig. 9 illustrates the one up and two down twill; Fig. 10 the one down and two up twill. Fig. 11 is a diagram of Fig. 9, two repeats of weave.

Constructing Twill Weaves

Mark off on design paper the number of squares required for the weave. Begin with the square at lower left hand corner and fill in the same for the first pick. For the second pick advance one square to the right and

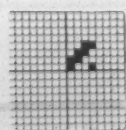


Fig. 12

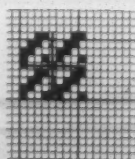


Fig. 13

fill in the same. For the third pick advance one square to the right and fill in the same. This will give a right hand

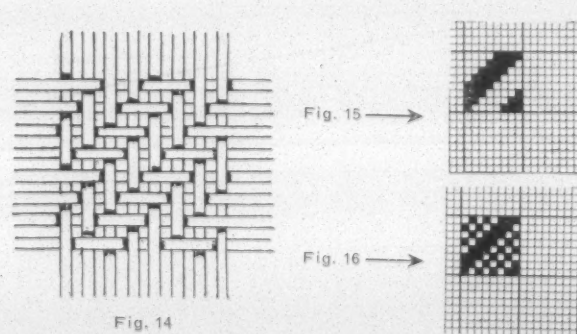


Fig. 14

unbroken. When more than one repeat is made, the twill line must join correctly at every point.

Fig. 13 illustrates two repeats of this weave, both ways, divided by heavy lines so that the correct joining can be seen at once.

Fig. 14 is a diagram of this weave.

Indicating Twills

A short method of indicating the twill required to be made is by ruling a line and then, instead of using the words up and down, mark with figures above and below the line the number of threads required to be raised or lowered. For example three harness twill one up and two down, thus:

1
—
2

The number above the line represents threads raised,



A REPUTATION IS A LIVING THING

Quality is a matter of refinements steadily bred into a product and sensitively cultivated.

General's policy is guided by faithful adherence to fundamentals through fluctuating conditions.

Ours is an attitude of perennial responsibility toward all those who deal with us.

This is how a business becomes planted deeper and deeper in its field of operations.

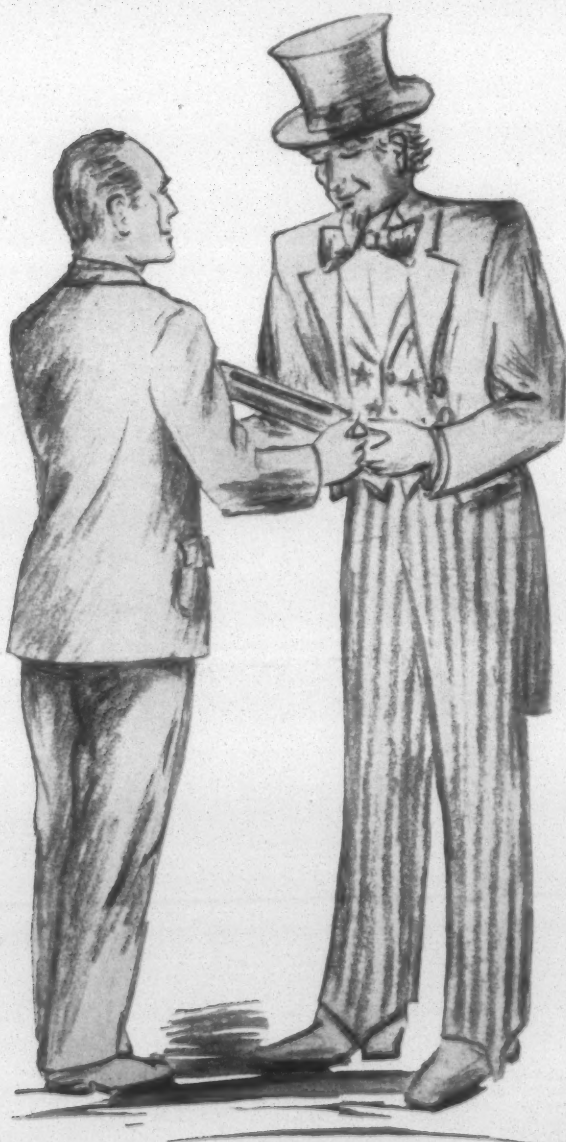
This is how our business grows and flourishes and its symbol becomes synonymous with Quality.

GENERAL DYESTUFF CORPORATION • NEW YORK

Draper Research

Has Produced

A Laminated Dogwood Shuttle



That is Proving as Good as
the One-Piece Dogwood Shuttles
You Are Now Using

It was designed to meet the Needs of our
Mills that are threatened with a Handicap to
their War Efforts by a Shortage of Dogwood.

Because Winning the War calls for Co-operation
and Because Good Shuttles are Necessary in
the Weaving of Fabrics Needed by Our Armed
Forces, we are reserving to ourselves no special
rights to this Shuttle.

We Offer It
to the Industry
to All Shuttle-Makers

If it proves the solution of the impending
problem and helps the Textile Industry in its
War Effort, we will be amply repaid.

DRAPER CORPORATION

Hopedale Massachusetts

Atlanta Georgia

Spartanburg S C

number below the line represents threads lowered. Four harness, two up and two down twill, thus:

$$\begin{array}{c} 2 \\ \hline 2 \end{array}$$

one up and three down twill, thus:

$$\begin{array}{c} 1 \\ \hline 3 \end{array}$$

Any twill can be represented in this manner.

Fig. 15 illustrates the $\frac{4}{1}$ twill.

$$\begin{array}{c} 4 \\ \hline 1 \end{array}$$

Fig. 16 illustrates the $\frac{3}{1} \frac{1}{1}$ twill.

$$\begin{array}{c} 3 \quad 1 \quad 1 \\ \hline 1 \quad 1 \quad 1 \end{array}$$

Classes of Twills

Twills are divided into two classes. First, even-sided twills; second, uneven-sided twills.

The first class are those twills that have an equal amount of filling on both sides of the fabric. Fig. 13 illustrates a twill of this class, having two threads raised and two threads lowered on each pick, so that the warp and filling are evenly balanced. Fig. 15 also illustrates this class.

The second class are those twills that do not have an equal amount of warp and filling on both sides.

Fig. 9 illustrates a twill of this class, which has two-thirds of the filling on the face. Fig. 10 also illustrates this class, having two-thirds of the warp on the face.

Warp Flush, Filling Flush Twills

Warp flush twills have warp predominating on the face, such as

$$\begin{array}{ccc} 2 & 3 & 4 \\ \hline 1 & 1 & 2 \end{array}$$

Filling flush twills have filling predominating on the face, such as

$$\begin{array}{ccc} 1 & 1 & 2 \\ \hline 2 & 3 & 4 \end{array}$$

Fabrics Made From Twill Weaves

Quite a number of fabrics are made from twill weaves both for civilian and military uses. Among these fabrics are the following: parachute fabrics of all kinds, denim, ticking, serge, gabardine, drill, silesia, jean, blanket, and others. These weaves are used for cotton, rayon, wool and worsted fabrics.

The five samples shown in Fig. 17 illustrate the principle of weave applications to different fabrics. Fig. 17 (A) shows nylon parachute fabric, $\frac{1}{2}$ twill. Fig. 17 (B) is a sample of rayon dress fabric $\frac{2}{3}$ twill. Fig. 17 (C) is wool blanket $\frac{2}{2}$ twill.



Fig. 17 (A)



Fig. 17 (B)



Fig. 17 (C)

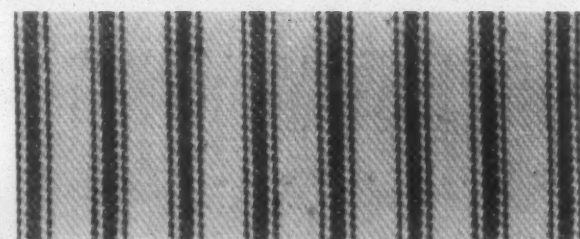


Fig. 17 (D)

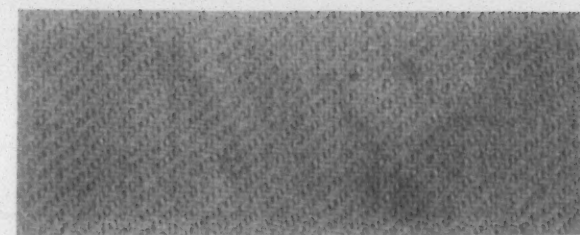


Fig. 17 (E)

illustrates cotton denim $\frac{2}{1}$ twill. Fig. 17 (D) shows cotton ticking $\frac{2}{1}$ twill. The final example, Fig. 17 (E), is a sample of rayon dress fabric $\frac{2}{3}$ twill.

Whitmire Plant of Aragon-Baldwin Mills Receives Production Award

WHITMIRE, S. C.—Recognition for fine performance in the production of war materials came Jan. 12 to workers and executives of the Whitmire plant of the Aragon-Baldwin Cotton Mills when the Army-Navy "E" was presented to the firm at ceremonies in front of the mill building.

Colonel Thomas W. Jones, contracting officer of the Philadelphia Quartermaster Depot, presented the pennant. Maj.-Gen. Clifford L. Corbin, who had been scheduled to officiate, was unable to leave Washington, where he has been the acting quartermaster general in the absence of Maj.-Gen. Edmund B. Gregory.

W. M. McLaurine, secretary of the American Cotton Manufacturers Association, was master of ceremonies. He presented Colonel Robert T. Stevens of the Quartermaster General's Office, Washington, who spoke briefly. Then followed Colonel Jones, who delivered the talk that was to have been made by General Corbin.

Jesse T. Crawford, superintendent, accepted the "E" flag from Colonel Jones.

Lieut.-Comdr. Ernest Burwell, a native of South Carolina, pinned the "E" emblems on employees Morris C. King, Leroy Pitts and William A. Bolin, with Mr. Pitts making the response.

In accepting the award, Mr. Crawford said: "Today brings to employees and to management alike, a thrill of

pride for the recognition our Government has seen fit to give us for a job well done in making for our fighting men the Army twill, the poplins for field jackets, the sleeping bag material, the boat cloth and the balloon cloth which are necessary to a final and complete victory over those nations who have sought to destroy us.

"I congratulate the men and women of the Whitmire plant for their good work which has earned for them



R. E. Henry
President of Aragon-Baldwin

this distinction; the highest award our Government gives to any organization. However, let us not forget, the acceptance today of the flag carries with it a challenge to us in the months to come and until this war is won. Our performances in the past shall only be stepping stones to higher achievements in the future. Our production record and the quality of our fabrics not only must be maintained, they must be surpassed if humanly possible."

Colonel Stevens stated that "Whitmire fabrics have moved with our Army, our Navy, and our Air Forces to the far-flung fighting fronts of the United Nations. Fine quality and volume production have been your contribution to the armed forces.

"So you see the importance of strong, well-made cloth. That is what the Army and Navy ask you to continue to produce—by the mile, not by the yard! I congratulate all of you on the splendid job you have done and know that you folks of Whitmire will continue to 'Keep 'Em Flying.'"

Officers of Mill

R. E. Henry of Greenville is president and treasurer of Aragon-Baldwin Mills; R. G. Emery is vice-president and general manager, and George P. McClenaghan is assistant general manager. Mr. Henry and Mr. Emery also serve in the same capacities with the Dunean Mills, Greenville, Watts Mills, Laurens, and Victor Monaghan Co., and Mr. McClenaghan is in charge of engineering for these companies.

The mill was purchased by the Aragon-Baldwin Mills in December, 1924, with J. P. Stevens & Co. of New York as selling agents. Many improvements have been made

MORE "E" AWARDS LISTED

Three more Southern textile mills have been added to the already large list of firms awarded Army-Navy "E" pennants. They are the Equinox Mill at Anderson, S. C., the Lebanon (Tenn.) Woolen Mills, Inc., and the Blueridge Co., Inc., Glasgow, Va.

The Equinox award will be made in the near future at ceremonies which are expected to draw many dignitaries. The mill has been manufacturing Army duck on a three-shift basis, with constant production increases.

Ceremonies at the Lebanon blanket plant will take place Jan. 27, with employees, management, sales force and invited guests present.

Also to be honored with "E" awards are three textile industry supply firms: Calco Chemical Division of the American Cyanamid Co. (Bound Brook, N. J., plant); the Rohm & Haas Co. (Bristol, Pa., plant); and the Stanley Works, New Britain, Conn.

(Continued on Page 33)

FOR VICTORY TODAY AND SOUND BUSINESS TOMORROW



Get This Flag Flying Now!

This War Savings Flag which flies today over companies, large and small, all across the land means *business*. It means, first, that 10% of the company's gross pay roll is being invested in War Bonds by the workers voluntarily.

It also means that the employees of all these companies are doing their part for Victory . . . by helping to buy the guns, tanks, and planes that America and her allies *must* have to win.

It means that billions of dollars are being diverted from "bidding" for the constantly shrinking stock of goods available, thus putting a brake on inflation. And it means that billions of dollars will be held in readiness for post-war readjustment.

Think what 10% of the national income, saved in War Bonds now, month after month, can buy when the war ends!

For Victory today . . . and prosperity *tomorrow*, keep the War Bond Pay-roll Savings Plan rolling in *your* firm. Get that flag flying now! Your State War Savings Staff Administrator will gladly explain how you may do so.

If your firm has not already installed the Pay-roll Savings Plan, *now is the time to do so*. For full details, plus samples of result-getting literature and promotional helps, write or wire: War Savings Staff, Section F, Treasury Department, 709 Twelfth Street NW., Washington, D. C.



Save With

War Savings Bonds

This Space Is a Contribution to America's All-Out War Program by

TEXTILE BULLETIN

Wool Research in U. S. and England

Points to Improved Product

THE possibility of successful commercial production in the post-war world of a wool that won't shrink, that can't be destroyed by moths or carpet beetles, and that won't age from such natural causes as sunlight, has been reported in the announcement of a new laboratory process for modifying wool, evolved by the research department of the Textile Foundation in Washington, D. C.

This report, made by Dr. Milton Harris, director of research for the foundation, points to the possible future importance to the wool industry of this process developed wholly in laboratory research—a technique admittedly responsible for a large share of the world's recent industrial progress and which at the present time is being fostered in one form or another by wool interests throughout the world, with notable results already reported both in the United States and England.

Parallels Research in England

Announced at this time, the report parallels in some respects progress made in wool research in England, sponsored in part by the International Wool Secretariat, representing the wool growers of Australia, New Zealand and South Africa; it also places special emphasis on the present problem of wool growers, dealers and manufacturers whose businesses have been built on the sterling character of wool and who are now more than ever concerned with maintaining their position in the post-war world.

In spite of the fact that no man-made fiber has yet been developed to combine the qualities which have made wool one of the world's favorite textile fibers, both the Secretariat and the American Wool Council, which represents the wool growers of North America, have fostered and are fostering wool researching rise in use of fibers uses of wool in the future as one means of maintaining wool's present position and of increasing human in the face of the continuing competitive to wool.

In his report, Dr. Harris declares that this new process for modifying the structure of the wool fiber may well become commercially feasible and that when this is accomplished, the new stabilized wool may win a wide market for itself.

Improved Resistance

In a preface to the report on the process, Dr. Harris and his associates make the following statement:

"Neither the softness nor the strength of the wools is impaired by the process, which consists of transforming the chemical linkages of the wool that involve sulfur to more stable ones. The well-known sensitivity of wool to attacks by moths and to damage by alkalies constitutes its greatest defect. Hence, improved resistance to such destructive agencies should prove of value in such common uses as clothing, blankets, carpets, and in certain industrial applications where it may be exposed to the action of harmful chemicals."

In order to protect or strengthen the point of attack, the report explains, the wool is treated with a chemical solution which reduces a portion of the wool linkage that is attractive to moths and other agents and which does

not destroy the wool's fibrous structure or change the other chemical linkages. The reduced wool is then treated with another chemical which causes the sulfur atoms to be linked through short hydrocarbon chains, producing new cross-links which are more stable than the original cross-links.

Tests conducted with both untreated and modified wool resulted in the following observations which are recorded in the report:

1. *Modified Wool is More Resistant to Alkali:* When boiled in a solution of sodium carbonate, it was found that the modified wool did not turn yellow as quickly as untreated wool; that the loss in tensile strength under such treatment was somewhat less and that greater resistance

(Continued on Page 40)

"Wool" Fiber From Soybeans

When science-minded Henry Ford turned the soybean over to his research laboratories he didn't expect the successful extraction of protein from soybeans, and the conversion of this protein into a fiber having many of the characteristics of wool.

Chemically speaking, the process is relatively simple. Oil is removed from the bean by solvents and the oil-free meal is dissolved and the protein precipitated with acid. After washing and drying, the protein is again dissolved, aged, and then forced through spinnerettes, emerging as fiber. The fiber is stretched, set, and dried, after which it is loose and fluffy, so that it might easily be mistaken for wool.

Hundreds of details had to be worked out painstakingly. Now the process has been standardized in a pilot plant and is ready for commercial production at the scheduled rate of 1,000 pounds per day in one of the Ford plants at Dearborn, Mich.

Originally designed for use in upholstery, the new fabric may be pressed into service as a substitute, partially at least, for wool in clothing and blankets.

HOW TO SOLVE

Operating Problems

with *Correct
Lubrication*

HIGHLY POLISHED
SURFACES LIABLE TO
CORROSION...WEAR

MUST SEAL OUT DUST
... PREVENT LEAKAGE

Prevent Corrosion & Pitting

AFTER YOU'VE DECIDED to use Gargoyle BRB Greases for ball bearings you can go back to getting out production and be assured *that* problem is solved.

These greases do not break down and form the deposits which lead to corrosion and pitting.

In fact, their reliable stability allows bearings to go through periods of a year or more without repacking.

In addition, these greases do not change in structure within wide temperature ranges.

Here are greases you can *depend* on! This has been proved in thousands of applications under operating conditions.

You've solved an important operating problem when you let the Socony-Vacuum man who calls on you specify Gargoyle BRB Greases for the ball bearings in your plant.



SOCONY-VACUUM OIL COMPANY, INC. — Standard Oil of N. Y. Div. • White Star Div. • Lubrite Div. • Chicago Div. • White Eagle Div. • Wadhams Div. • Southeastern Div. (Baltimore) • Magnolia Petroleum Co. • General Petroleum Corp.

CALL IN SOCONY-VACUUM

Fine Cotton Goods Ceilings Broadened to Cover 114 Weaves

OFFICE of Price Administration controls over fine cotton goods were enlarged considerably Jan. 7 under Maximum Price Regulation 11. Stated purpose of the new price order is to bring an increased percentage of production of these textiles under new and uniform ceilings and at the same time set workable limitations on types and constructions of fine goods that may be produced.

The new order became effective Jan. 13.

In a complete revision of Revised Price Schedule 11, its coverage of 29 constructions of seven types of fine cotton goods was extended to include 114 constructions of 20 types of such goods. Cents-per-yard maximums provided apply chiefly to manufacturers' sales.

Most of the goods which were brought under the schedule had previously been priced either under the General Maximum Price Regulation or Regulation 157—Sales and Fabrication of Textiles, Apparel and Related Articles for Military Purposes. The level of prices in the new regulation is approximately three per cent below those established under the General Regulation. Insofar as prices are reduced by the action, OPA expects that in many cases consumers will experience corresponding decreases in prices or improvement in quality of the apparel made from these goods.

Since relatively few constructions had been covered under Schedule 11, manufacturers found it to their ad-

vantage to make but slight variations in constructions to produce cloths subject to the General Regulation, with the result that there was no upward trend in prices in more than 50 per cent of combed fabric constructions not subject to Schedule 11 in the months of December, 1941, through March, 1942. In consequence, the levels of fine goods prices under the General Regulations were approximately 16 per cent higher than under Schedule 11. The ceilings now established are said to take into consideration certain cost increases to which mills have been subjected although the industry is called upon to absorb a minor portion of the total increases.

Because of the tendency for mills to switch to the constructions which they could make more profitably under the universal ceiling, producers have been making scarcely any fabrics covered by Schedule 11, even though most of those goods are of great importance for military and industrial purposes. In setting ceilings under the newly issued Regulation 11, OPA provided a profit incentive that is supposed to be sufficient to provide the needed output of fine goods. The prices established fully meet the agricultural price requirements of the Emergency Price Control Act of 1942 as amended.

"The effects of the new schedule of prices on the profits and production of the industry will be followed closely," OPA said.

With stated exceptions, the regulation covers all gray goods made wholly of combed cotton yarn and in addition applies to gray sateens made in whole or in part of combed cotton yarn, and unfinished box-loom clip-spot marisettes and beat-up marisettes made of combed or carded cotton yarn or any combination thereof.

Other Provisions

For clip-spot marisettes, the previously established base maximum price of a 8½c under Schedule 11 is continued under Regulation 11. Differentials for standard constructions other than the base construction are also continued without change.

One of the objectives of the regulation is to limit the number of fine goods constructions produced for the purpose of facilitating price control. This is accomplished through a table of poundage prices for fabrics for which a specified yardage price is not set forth. These ceilings, in cents per pound, will result in a lower return to the mill than would be realized through the production of a cloth for which a cents-per-yard price is especially provided. The procedure has been discussed with and found acceptable to the trade, OPA said.

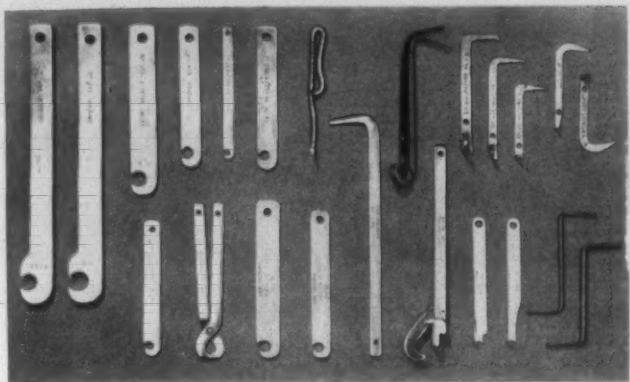
(Continued on Page 37)

F. D. R. ON RENEGOTIATION

Textile executives, constantly faced with new and altered price rulings, were not made any more optimistic by President Roosevelt's latest statement on the renegotiation of war contracts. In his budget message to Congress the President said:

"The procurement program must achieve maximum production with minimum waste and with the speed essential in time of war. This is the controlling objective not only for the original negotiation of contracts but also for the renegotiation required by law. The law provides for the prevention or recapture of excessive profits, thus supplementing and reinforcing the objectives of the excess-profits tax. I believe that the control of the costs of production is of equal importance.

"The proper negotiation and renegotiation of contracts must strive to reconcile the avoidance of excessive profits with the maintenance of incentives to economical management."



Check Traveler Waste with the Proper "Putting-on" Tools

Considerable traveler loss or spoilage occurs when they are being put on the rings. You can save travelers, and save critical metals, by equipping ring spinners and twister tenders with properly designed hooks or wrenches.

The hooks and wrenches above were designed by Victor for applying Horizontal Travelers. They are shown, together with many other types for Vertical Travelers, in the Victor Wrench Circular, which also includes instructions for use of popular styles.

Be sure to keep a copy of the Victor Wrench Circular on hand. And for any help you need in getting the most hours of service life from travelers on your spinning or twisting, ask a Victor representative.

VICTOR RING TRAVELER COMPANY



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173 W. Franklin Ave.
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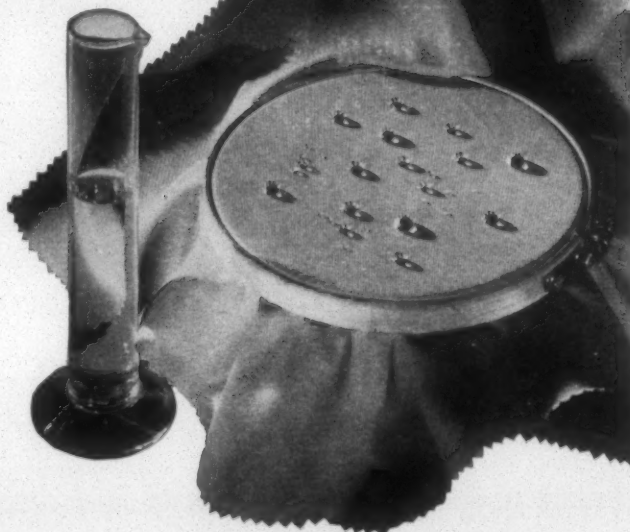
Ring Travelers

Handkerchiefs Now "Crown" Tested

Minimum requirements for stability of women's woven rayon handkerchief fabrics have been set up by the American Viscose Corp. under its "Crown" Tested Plan. To meet the requirements the fabrics must have a tensile strength dry of 30 lbs., and wet, 15 lbs.; and must pass tests for color fastness to laundering, crocking, sunlight and atmospheric fading. Dimensional restorability of the fabrics shall not exceed two per cent, which means that they may be restored after laundering to within two per cent of original dimensions by normal ironing and shaping methods. In addition to the above, the handkerchief fabrics are tested for absorbency by Haven's method.

The requirements are known as No. 117 and copies have been issued to licensees who are operating under the "Crown" Tested Plan.

DRAX^(#1860)

does it!


**... the water-repellent textile finish.
by the makers of Johnson's Wax**

Many uniforms, many fabrics are now waxed with DRAX. The demand for this new textile finish is spreading rapidly throughout the industry.

DRAX is a high-quality, water-repellent textile finish—a stable, aqueous emulsion of waxes and non-critical salts and emulsifying agents. DRAX does not change color or "hand" of textiles. It may be used on vat or sulphur-dyed textiles.

Fabric fibres are thoroughly impregnated by the extremely fine, uniform particles of the DRAX emulsion. Non-flammable and inexpensive, DRAX is supplied to meet Army Quartermaster Department specifications.

DRAX is also available in special formulations with mildew-resisting agents added. Write for further facts about DRAX. Test samples will be sent promptly.

DRAX is being advertised on the Fibber McGee and Molly program, radio's No. 1 show.

TRY DRAX...
by the makers of
Johnson's Wax



S. C. JOHNSON & SON, Inc.

Industrial Wax Division - Department TB-13
Racine, Wisconsin

☆ Buy United States War Savings Bonds and Stamps ☆

MILL NEWS

WEST POINT, GA.—West Point Mfg. Co. has declared a quarterly dividend of 90 cents payable Feb. 1 to stock of record Jan. 15.

DURHAM, N. C.—A war production drive is now being directed by a labor-management committee recently set up at the Erwin Cotton Mills Co.

SYCAMORE, ALA.—The Sycamore plant of the Avondale Mills is listed among a group of one hundred war plants who have established labor-management committees now directing war production drives.

GASTONIA, N. C.—The Groves Thread Co., Inc., has been awarded a trophy by Governor J. Melville Broughton for operating over a period of five years without a disabling accident in the finishing department.

GREENSBORO, N. C.—Burlington Mills Corp. reported for the fiscal year ended Sept. 26 net profit of \$3,372,388, equal to \$4.68 a share on the common stock, against \$3,373,558, or \$4.87 a common share, in the preceding fiscal year.

SLATER, S. C.—S. Slater & Sons, Inc., sold and delivered \$48,000 worth of war bonds during the year 1942.

These sales were made by the payroll deduction plan at the plant and do not include the bonds and stamps sold by the Slater postoffice.

GALAX, VA.—The Galax Weaving Co. recently mailed bonus checks to 25 former employees now serving in the armed forces. The company also entertained the children of its employees at a Christmas party. Santa Claus was present in person and distributed gifts and candy to the children.

It was the sixth consecutive year that the company has given a Christmas party to the children of its employees.

ASHEBORO, N. C.—J. M. Schloss and Paul C. Brockmann have acquired all of the outstanding stock of Sunspun Chenilles, Inc., according to an announcement made here. It was also stated that in the future the business would be operated as a partnership instead of a corporation.

Mr. Schloss will continue as resident manager, while Mr. Brockmann will be located in New York City as selling agent.

Sunspun Chenilles, Inc., was established here in June, 1940, by Mr. Schloss and Mr. Brockmann, who leased the building on Hoover street formerly occupied by the Steadman Mfg. Co., manufacturers of handkerchiefs.

Sunspun Chenilles, Inc., is engaged in the manufacture of chenille bedspreads.

SYLACAUGA, ALA.—Comer-Avondale Mills, Inc., cotton yarns, recently held a sales conference at its New York office, at which 14 officers and representatives of the organization from various sections of the country were present. Discussions relative to company policy and the cotton yarn situation were brought up at the meeting.

CHERRYVILLE, N. C.—Employees of the Rhyne-Houser Mfg. Co. are now enjoying the use of the mill community house, completed last fall at a cost of \$15,000. The building is of brick, Colonial design, and houses an auditorium, reading room, library, kitchen, first aid room, reception room and work rooms where manual arts are taught.

KANNAPOLIS, N. C.—The Cannon Mills Co. and its thousands of employees have been commended by the Navy for the "splendid performance in meeting required delivery dates of materials."

The letter of commendation was received by Charles A. Cannon, president of the textile manufacturing firm, from Rear Admiral H. L. Brinser of the Navy Department's office of inspector of naval material.

Rear Admiral Brinser paid special tribute to men and women employed by the Cannon firm, for their wholehearted co-operation in turning out textiles needed sorely in the global war.

GREENVILLE, S. C.—Year-end dividends paid by Greenville area textile manufacturing plants include the following:

Brandon Corp., 2½ per cent on common Dec. 31, and 3½ per cent on preferred.

Camperdown Co., a quarterly payment of 1¾ per cent on preferred.

Florence Mills, \$1.75 on preferred.

Piedmont Plush Mills, Inc., semi-annual payment of 3½ per cent on preferred.

Southern Franklin Process Co., \$1.75 on preferred. Twenty-five cents was paid on common.

Southern Weaving Co., \$2 on common.

EMPORIA, VA.—An early morning fire broke out in the Southampton Textile Mill recently. The mill narrowly escaped destruction. The fire, which occurred in one of the looms while the mill was in operation, spread so quickly that it was beyond control before the volunteer fire company could reach the scene.

The mill is a subsidiary of the Northampton Textile Mills of Mount Holly, N. J., and an estimate of the damage could not be given until representatives of this firm inspected the property with insurance adjusters.

Approximately 50 men and women were thrown out of employment by the fire. Charles Seifert is the manager of the mill, which was purchased by the Northampton Textile Mills about five months ago.



76 Years of STARCH SERVICE

Since 1866 our policy of Fair Service to All has been the bulwark of our business. It has withstood the test of two major wars and several depressions. Today our customers have confidence in our ability to protect their interests . . . especially through the present emergency. They have confidence in the high quality of our textile starches . . . corn, potato, wheat . . . which reflect the craftsman's art in skillfully converting the best materials the world affords. This customer confidence is one of our most valuable assets. We shall do all in our power to preserve and strengthen it.

STEIN, HALL & COMPANY, INC.

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CHARLOTTE, N. C.



WENTWORTH Double Duty Travelers



Reg. U. S. P. O.

Hicks, American, Wilson, U. S. Standard

Last Longer, Make Stronger Yarn, Run Clear, preserve the SPINNING RING. The greatest improvement entering the spinning room since the advent of the HIGH SPEED SPINDLE.

NATIONAL—ETARTNEP FINISH
A New Chemical Treatment

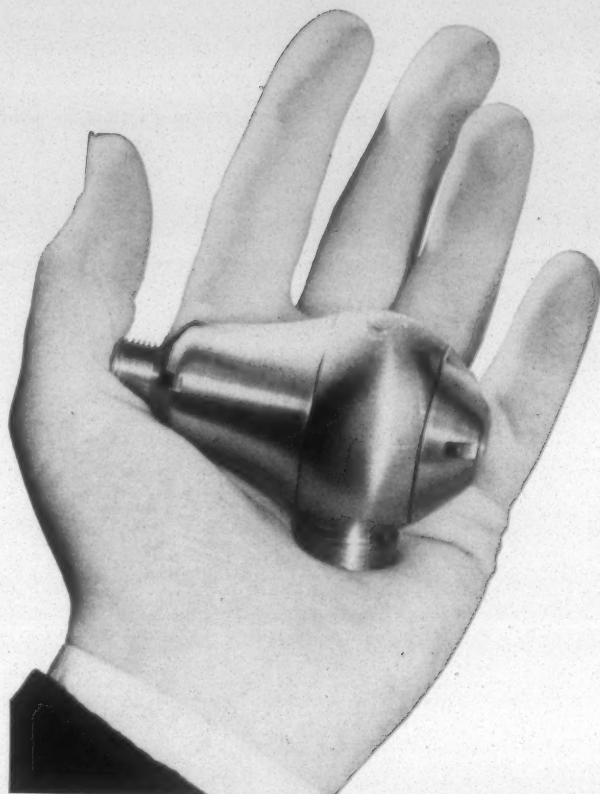
Manufactured only by the

National Ring Traveler Co.

Pawtucket, R. I.

131 W. First Street, Charlotte, N. C.

L. EVERETT TAYLOR, So. Agent



The Reliable Atomizer

Looks like a sweet potato partly for streamlining, so as not to catch lint; partly to make it *diaphragmatic*.

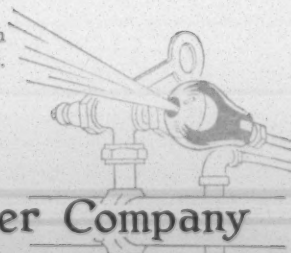
After hard and continuous mill service, orifices in the self cleaning

Parks Turbomatic Humidifier

still remain normal in size, shape, and alignment—also in action.

Rated conservatively. No double standards; one for our laboratory—one for your mill.

Interchangeable with
earlier Turbo models.



Parks-Cramer Company

Fitchburg, Mass.

Boston, Mass.

Charlotte, N. C.

PERSONAL NEWS

Albert R. Tanner, formerly with Sibley Mfg. Co. of Augusta, Ga., is now assistant superintendent of the Bladenboro (N. C.) Cotton Mill No. 1.

Ross N. Stribling, formerly with the American Enka Corp., Asheville, N. C., has been promoted to major at Fort McClellan, Ala.

Charles A. Cannon, president of Cannon Mills Co., has been named man-of-the-year for 1942 by the Kannapolis, N. C., Junior Chamber of Commerce.

John Boyle, formerly a representative of Eagle & Phoenix Mills, Columbus, Ga., has been inducted into the Army.

David Clark, editor of the TEXTILE BULLETIN, has been elected to the board of directors of the Engineers Club of Charlotte, N. C.

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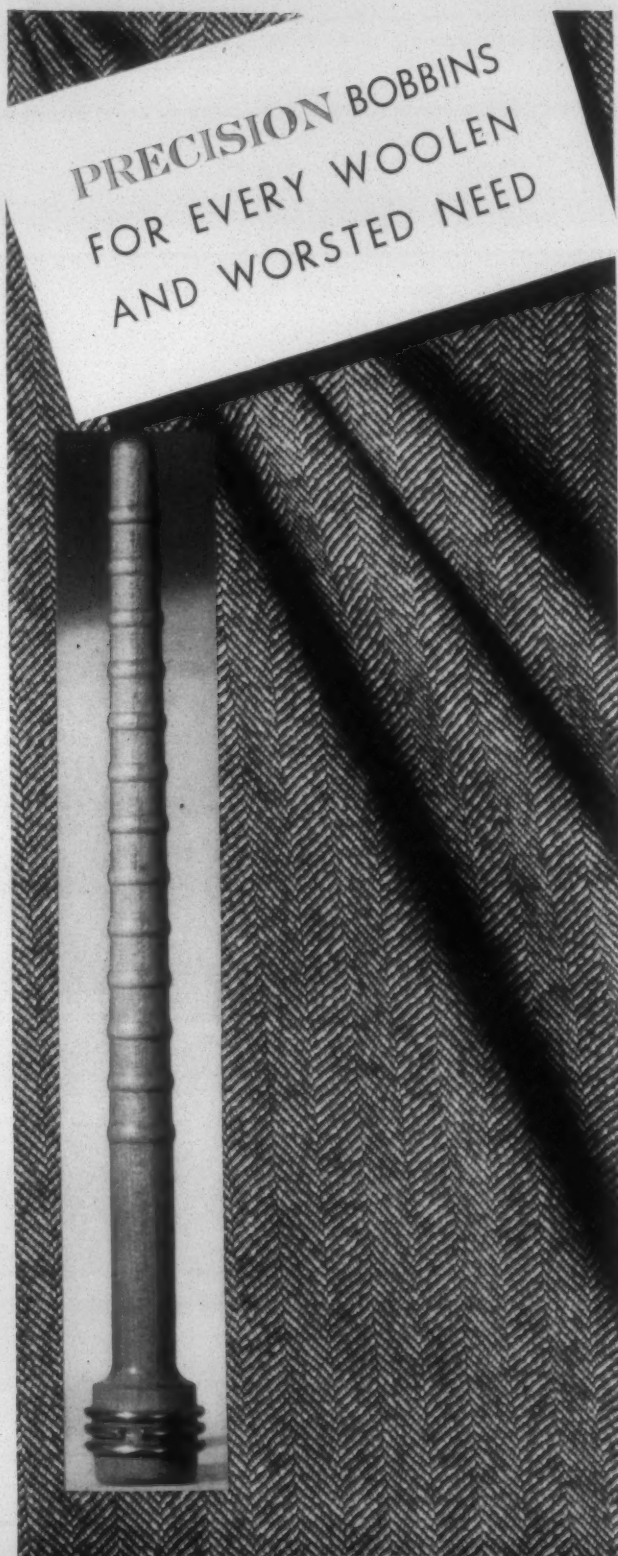
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BOBBIN & SHUTTLE CO.

George M. Hambleton, Gen. Mgr.
NASHUA, NEW HAMPSHIRE

PERSONAL NEWS

Albert R. Tanner, formerly with Sibley Mfg. Co. of Augusta, Ga., is now assistant superintendent of the Bladenboro (N. C.) Cotton Mill No. 1.

Ross N. Stribling, formerly with the American Enka Corp., Asheville, N. C., has been promoted to major at Fort McClellan, Ala.

Charles A. Cannon, president of Cannon Mills Co., has been named man-of-the-year for 1942 by the Kannapolis, N. C., Junior Chamber of Commerce.

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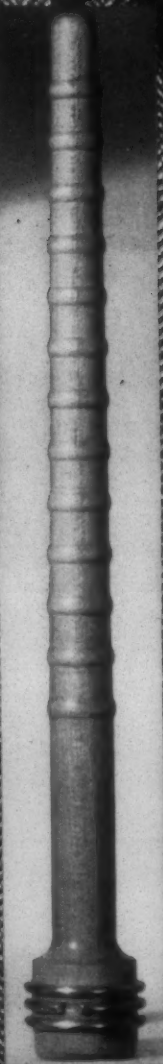
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David Clark	President and Managing Editor
Junius M. Smith	Vice-President and Business Manager
F. R. Carey	Vice-President
Ellis Royal (On leave in U. S. Army)	Associate Editor
James T. McAden	Associate Editor

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Contributions on subjects pertaining to cotton, its manufacture and distribution, are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Items pertaining to new mills, extensions, etc., are solicited.

Fish Education

"Training Fish to Beware of Strangers" is the title of a leading article scheduled to appear in an early issue of the *Domestic Commerce Weekly*, published by the U. S. Department of Commerce.

Printers and publishers affected by recent WPB orders which greatly reduce the amount of paper they can use this year, can now find consolation in the knowledge that some of the paper denied them will be used for publication of such highly educational material.

However, we had somehow gained the idea, probably from our own bitter experience, that fish, by nature, are exceedingly "snobbish" and aloof, and that they do not need any "training" along the line suggested by the title of the above article.

In the same issue of *Domestic Commerce Weekly* they announce as another story "She Brought Forth Butter in a Lordly Dish." We do not know the "she" who brought forth the butter but we do know that it required some paper to narrate her accomplishment.

Those who desire to be still further educated can, for the asking, obtain from the Department of Commerce a pamphlet printed a few years ago and entitled "The Love Life of a Bullfrog."

Not only do the above mentioned publications represent a consumption of paper and require manpower for their printing but people are actually paid for preparing the reading matter.

Cause for Anger

We become angry every time we realize that Admiral Kimmel, General Short and the officers of the Rubber Reserves Corp. are still drawing the full amount of their salaries.

Admiral Kimmel and General Short, by gross carelessness and inattention to their duties, caused an immense loss at Pearl Harbor, but get their monthly checks just like those who are fighting this war and bearing its burdens.

The officers of the Rubber Reserves Corp., which was organized for the purpose of obtaining an early supply of rubber for our army and our citizens but delayed the production of synthetic rubber in an apparent effort to give a monopoly to a group of their friends, are still drawing their salaries, although their reprehensible conduct caused the establishment of another organization under Mr. Jeffers as rubber co-ordinator.

Russia, with its handicaps, was able to obtain a supply of synthetic rubber in six months' time, but thanks to our Rubber Reserves Corp., it will require almost two years to get a partially adequate supply for the United States.

The Rubber Reserves Corp. allotted \$621,000,000 for synthetic rubber plants, but according to the testimony of those who investigated the matter, refused offers of assistance made by Russia and blocked every effort of those who were prepared to make rubber quickly of alcohol made from grain.

Months ago Congress appropriated a large sum for an oil pipe line reaching from Pensacola, Fla., to the inland waterway at Jacksonville, but homes in the Eastern States are cold because somebody has delayed the construction of that pipe line.

Admiral Kimmel, General Short and the Rubber Reserves Corp. officers still draw their pay. Benedict Arnold did not.

Will Japs Move Textile Mills?

A Tokyo dispatch radiocast by Berlin says plans are being made for moving a large part of the Japanese textile industry to China to utilize more effectively the vast resources of raw material and labor offered by China. One reason was said to be to remove them from zones likely to be bombed when the Japanese homeland comes under attack.

This statement does not appear to us to make sense, for textile mills in China will be nearer the Chinese and American forces and will probably be bombed or captured before the Allies pay their respects to Japan.

Textile Workers' Pay

According to the report of the South Carolina Unemployment Commission now being prepared for presentation to the General Assembly, South Carolina textile workers, 122,251 of them, collected \$118,391,340 in wages during the fiscal year, July 1, 1941-June 30, 1942.

We may observe that \$118,000,000 is a right sizable sum of money measured from every standpoint except that of present war orders.

A considerable per cent of those who received the \$118,000,000 are the grandchildren or great grandchildren of persons who lived most of their lives as tenant farmers, or in the coves of the mountains of North Carolina, without running water, without toilets and without schools and who seldom handled as much as \$5 in money during an entire year.

When men from Charleston began to finance the building of cotton mills in the Piedmont section of South Carolina a new day dawned for many families who had lived in abject poverty, but no one dreamed of the day when \$118,000,000 would be paid in a single year to employees of South Carolina textile mills.

Conserving Manpower.

The letter below has been received from Donald Hammond, director of the War Production Fund to Conserve Manpower (of the National Safety Council):

We have just received the December 15th issue of *TEXTILE BULLETIN*, containing the article "Accidents—War-time Saboteur of Manpower," and we are delighted that your publication is supporting the national accident prevention movement sponsored by the War Production Fund and the National Safety Council.

I am sure that your splendid co-operation will contribute materially towards the success of this vital war-time assignment, and assure you that your interest is deeply appreciated.

The *TEXTILE BULLETIN* is always interested in any movement which is of benefit to the textile industry. The efforts of the National Safety Council most certainly come in that class.

Many Southern cotton mills for a long time have shown enthusiasm for cutting down the accident rate among employees. The state manufacturers' associations have induced their members to take part in annual campaigns and contests. Results of these efforts have made the initial costs seem minute.

The current country-wide drive by the National Safety Council comes at a very appropriate time. The manpower shortage is unquestionably being felt right now by every mill, and the situation will get no better.

Would Destroy Our Social Structure

Speaking before the Southern Society of New York, Governor Frank M. Dixon of Alabama charged that the unsuccessful attempt to abolish the poll tax and the operation of the United States Employment Service and the Fair Employment Practice Committee were primarily efforts to change the social structure of the South.

Governor Dixon asserted:

"Suggestions are rife as to the formation of a Southern Democratic party, the election of unpledged representatives to the electoral college. Ways and means are being discussed daily to break our chains. We will find some way, and find it regardless of the effect of national elections, if this senseless attack keeps up. . . ."

Governor Dixon said the social structure of the South was built and could endure only on the principle of segregation meaning "separation of the races, not mistreatment of any one."

Governor Dixon expressed what is being heard more and more in the South, and that is if we are to be turned over by New Deal leaders, to "modern carpetbaggers," among the group of Northern people who believe that their chief mission on this earth is to regulate the conduct of the people of the South, we will cease to vote according to the dictates of the leaders of the Democratic party.

The best people of the North are perfectly willing for the South to solve its own problems, but the "modern carpetbaggers" plus those who seek the negro vote of their states, are trying to destroy our social structure.

Whose Ox?

The *Raleigh News and Observer* says editorially:


No member of Congress can consistently criticize any expenditure as long as a dollar is appropriated to let the Dies committee continue to smear good men. Vice-President Wallace weighed his words carefully when he said "the effect on our morale would be less damaging if Mr. Dies were on the Hitler payroll."

In matters of this kind it seems to be a case of "whose ox is gored."

Vice-President Wallace, if we are correctly informed, does not believe in private enterprise and is in accord with the communist platform, and the *Raleigh News and Observer* stands about in line with Mr. Wallace.

Both would be strongly in favor of the Dies committee if it were making unfavorable reports upon big corporations but they naturally resent any exposure of the disloyal activities of their associates and friends.

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DYEING AND FINISHING

The Processing of Synthetic Fibers and Fabrics

By GEORGE BROUN—PART FOUR

Dress Goods

THE increasing amount of viscose rayon and acetate dress goods containing aralac is making rayon and acetate dyers feel as if they were becoming "milk fed" again.

Aralac, the new yarn made from casein (the dairy industry's by-product), has had a phenomenal growth since the use of wool for dress goods was curtailed due to military requirements. During the past few years rayon dyers have been processing many types of novelty fabrics using different animal fibers such as wool, mohair, rabbit hair, as well as the crinkled acetate fibers. These fabrics have been cross dyed, but with the Government taking over practically all animal fibers for military needs, only the novelty crinkled acetate and aralac fibers are left to be used as replacement fibers. These two fibers are doing an excellent job of it as one can see by the dress goods fabrics now being sold.

Due to wartime conditions many spun-rayon-aralac constructions are appearing in place of rayon-wool. This trend may carry over into the acetates and include a range of fabrics of spun acetate-aralac goods. Such a line may prove more expensive to process and finish, so it may not make much headway with the consumer.

Thorough Checking Necessary

The well-organized rayon finishing plant always checks each incoming fabric for construction, fibers present, and approximate percentage of various fibers; then a series of laboratory dyeings is made to check on requirements of each fabric as to penetrability. The question of penetration and level dyeing results is of vast importance to the dyer and finisher, for if the fabric has any particular peculiarities, they must be known beforehand so as to adjust their processing and dyeing formulas to meet these special requirements.

Careful technical control in each of the wet processing operations is essential for satisfactory dyeing, bleaching and finishing results.

As the desizing operation is the first wet operation that requires control, the plant officials must know whether the goods are sized with starches, vegetable gums, dextrine,

or with gelatine, casein, glues, or other agents of this type.

For the starches and allied sizing agents the amylolytic-enzymes are recommended for use at 100-160° over a period of three to six hours. The goods may be padded or run on a jig for two to six ends, then allowed to stand until proper solubilization of the starches and other sizing materials has taken place. The goods then may be run through the boil off or causticizing bath according to the range of operations used in the plant.

For goods containing gelatine and similar agents, the proteolytic enzymes can be used advantageously wherever the sizing material is of poor solubility. In many cases, padding or jigging in hot water will remove the more soluble type of gelatine sizes sufficiently enough for entering the goods into the boil off or causticizing operations.

In many plants where the lighter weight rayon goods (filament yarns) and spun rayon goods are run, the preliminary desizing operations may be omitted and the desizing and the causticizing of the goods carried out in the causticizer and boil off baths.

Causticizing As An Equalizing Fabric Operation

Spun rayon fabrics in the gray are of uneven appearance and require treatment to give them uniformity for level dyeing and satisfactory finished appearance.

To overcome this lack of uniformity in gray spun rayon goods, the goods are given a caustic treatment by running them through a caustic bath of twaddle. This operation may be run in an open width creper causticizer; or, the goods can be padded, batched and then run through a cold washer preliminary to entering in a hot washer or soaper for removing the excess alkali and giving the desired shrinkage or setting effect for goods under process. After the goods are run through the hot washer from one to three minutes they are given a cold wash and batched ready for subsequent dyeing, printing or bleaching operations.

This causticizing, washing hot and cold treatment helps to equalize the rayon fibers, whether spun or filament, by

(Continued on Page 46)

Piedmont Section A. A. T. C. C. Officers Make Plans for Year

Problems caused by transportation difficulties and gasoline restrictions was one of the principal topics discussed by the officers of the Piedmont Section of the American Association of Textile Chemists and Colorists who met in Charlotte, N. C., Jan. 10.

C. Norris Rabold, chairman, and chemist for the Union Bleachery, Greenville, S. C., presided. Other officers present included: Leland G. Atkins, secretary, of Southern Dyestuff Corp., Charlotte; Wyss L. Barker, treasurer, of National Aniline Division, Allied Chemical and Dye Corp., Charlotte; A. Henry Gaede, councilor, of Laurel Soap Mfg. Co., Charlotte; T. W. Church, Jr., councilor, of Highland Park Mfg. Co., Charlotte; and Peter S. Gilchrist, committeeman, of Charlotte Chemical Laboratories.

Also present was Thomas R. Smith, president of the national body, and superintendent of the Wiscasset Mills Yarn Dyeing Division, Albemarle, N. C.

The Piedmont Section of A. A. T. C. C. ordinarily holds four meetings each year, but due to the unusual conditions brought about by war emergencies, rationing, and other problems confronting the industry it was decided to hold only three meetings in 1943. It is planned to hold the first meeting in Greenville, S. C., early in March. Greensboro, N. C., was selected for the second meeting in May or June. The fall meeting will be held in

Charlotte in October. The exact dates of the various meetings have not been decided. It was decided to dispense with all social functions, such as golf tournaments, etc., for the duration, or at least until the acute problems of transportation have been solved.

The mills represented by the membership are running on such busy schedules that it was decided to hold the various meetings on Saturday evenings to permit attendance by a larger portion of the membership. The technical meetings in previous years were frequently held on Saturday afternoons to permit the discussion of a larger number of problems and new methods of interest to the membership.

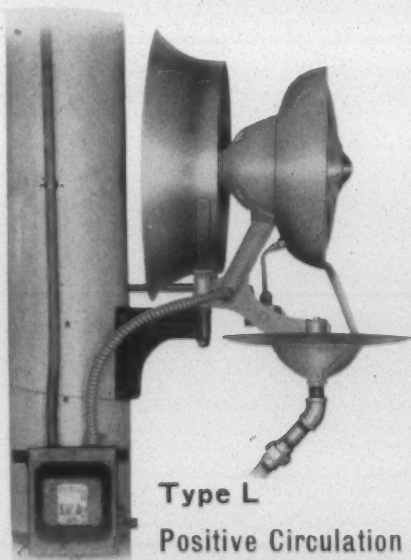
The committee plans to focus the attention of the membership on problems pertaining to the war program in all of the meetings this year.

"Khaki" is Persian for Dust

The color "khaki" comes from the Hindustani and Persian word "khak," meaning earth or dust, the National Geographic Society reported recently in giving this account of its origin:

"British soldiers in India during the wars with the Sikhs, 1845-49, felt too conspicuous for comfort in their campaign whites. They needed camouflage. By dipping their uniforms in muddy water they changed them from white to—the Sikhs had a word for it—khaki."

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High Capacity—
Low Cost—

The Bahnson Company is reduced to repairs and maintenance, except on high priority demands. The very nature of our product as well as the critical materials we use, place them high on the list of war necessities. There are no priorities on our engineering skill and textile experience, however. . . We can, we are, and we shall continue service on every Bahnson installation to the utmost of our ability.

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To Increase Hemp Seed Acreage

LEXINGTON, KY. — Kentucky's 1943 production of hemp seed will be stepped up while the state's acreage of hemp for fiber will be reduced, Federal officials have informed members of the State Agricultural War Board.

Dr. S. H. McCrory, director of the hemp division, Federal Commodity Credit Corp., and Dr. B. B. Robinson, head of the fiber division, plant industry, U. S. Department of Agriculture, conferred with board members and other agricultural leaders on the hemp situation.

Malcolm D. Royse, Winchester, State War Board chairman, said the board was told Kentucky's 1943 goal would be 50,000 acres. An estimated 36,000 acres were grown last year.

The state's goal for hemp to be used for fiber, Royse said, has been reduced from approximately 45,000 acres to 27,000 acres.

The chairman said the Federal officials explained the reduction in the hemp fiber goal was caused by a scarcity of hemp seed and that the curtailment would be generally reflected throughout the hemp-growing states.

Wage Increase Applications Available

The National War Labor Board is now considering applications from employers for wage increases. Such applications are first considered by the Wage and Hour Division of the Department of Labor and, if they are found to conform to the requirements of the regulations, they are then forwarded to one of the regional offices of the War Labor Board. The first necessary step is to write to the nearest regional or district office of the Wage and Hour Division and request copies of a form which has been prepared for the purpose of submitting the application. After the form is filled out, it should be returned to the same office, where it will have prompt attention. If the application is such that it cannot in the opinion of the Wage and Hour Division be approved, the applicant will be notified to that effect. If it meets the requirements of the regulations, it will then be forwarded to a Regional Director of the War Labor Board for further consideration.

The forms for making an application may be obtained from any of the following offices of the Salary Stabilization Unit, Bureau of Internal Revenue: Bureau of Internal Revenue Building, Washington, D. C., for Maryland, North Carolina, Virginia and West Virginia; 717-720 William Oliver Building, Atlanta, Ga., for Alabama, Florida, Georgia, South Carolina and Tennessee; Williamson Building, 215 Euclid Ave., Cleveland, Ohio, for Kentucky; Tower Petroleum Building, Dallas, Tex., for Louisiana, Mississippi and Texas.

When writing, request SSU Form No. 1.

Whitmire Plant of Aragon-Baldwin Mills Receives Production Award

(Continued from Page 18)

in the mill and its equipment since then and the company has erected many new homes.

The present community has more than 460 residences with modern conveniences. A modern incinerator recently was installed, there is a well-equipped Y. M. C. A. and motion picture theater, an attractive community house, a playground and other recreational facilities at the mill. The mill was converted to war production early in 1941 and today 93 per cent of its output is for the armed forces. Approximately 270 former Whitmire mill workers are in the various branches of the service, many having enlisted at the outbreak of the war.

Among those connected with the textile industry in attendance were: John P. Stevens, Charles Underwood, David Jennings, Harry Ferguson, Oscar Jacobs, Alex Anthony, Gardner Johnson, Walter Allen, W. C. Bennett, William Gallon, James Shields and Joseph Sutherland of J. P. Stevens & Co., New York; Lieut.-Col. John Baum, of the Quartermaster General's Office, Washington; Lieut.-Col. Albert E. Dennis of the Philadelphia QM Depot; Colonel Woodward and Major Hugh O. Clarke, Jr., of Charlotte, N. C., QM Depot; Cary Page of Greenville, S. C.; Clare Draper of Draper Corp., Spartanburg; J. E. Sirrine of Greenville; W. H. Porcher of the Charlotte office of Whittin Machine Works; Ben Phetteplace of Southern Franklin Process Co., Greenville; Brown Mahon of Dunbar Mills; Horace Johnston and Tom Church of Highland Park Mills, Charlotte, N. C.



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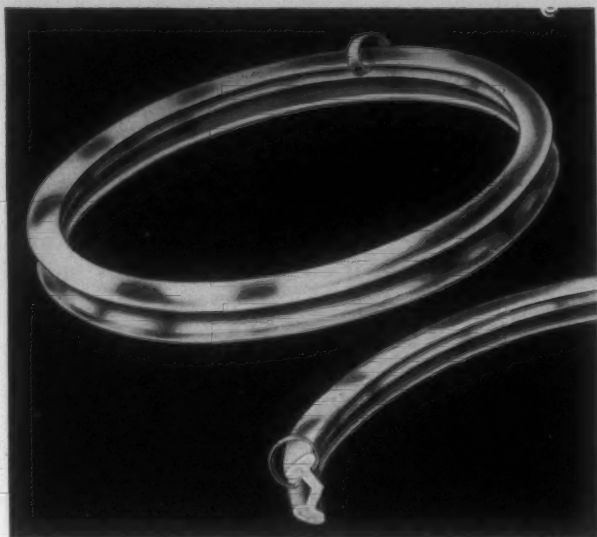
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COLUMBUS, GEORGIA**

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DALLAS, TEXAS**

**AUTOMATIC LOOM, SPINNING
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Accurately Made—Rigidly Tested

**H. & P. Spool & Bobbin Co.
LAWRENCE, MASS.**



RAGAN RINGS not only increase spindle efficiency but also help to improve yarn quality. These are definite reasons why . . . ask for the whole story and samples

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HOTEL

A. A. T. T. Members Name Officers

John Hagen of Callaway Mills has been re-elected president of the American Association of Textile Technologists. William F. Macia of A. M. Tenney Associates has been made first vice-president and Pierre Sillan of American Viscose Corp. becomes second vice-president.

Bernice Bronner of Good Housekeeping Institute has been re-elected secretary. The association has elected Ralph Gutekunst of Hellwig Silk Dyeing, who filled the unexpired term of the late Oscar Geier, for a full term as treasurer.

Three members elected to serve three years on the board of governors are John Goldsmith of Hess, Goldsmith & Co.; M. Earl Heard, dean of Philadelphia Textile Institute, and Carl I. Taber of the Acetate Division of E. I. duPont de Nemours & Co.

Paul Whitin of Paul Whitin Mfg. Co. was elected to fill the vacancy on the board left vacant by the elevation of Mr. Sillan to a vice-presidency. The elections of letter ballot were announced at the recent annual meeting.

Fire Ruins Old Mill, Warehouses

GREENVILLE, S. C.—The Pelham Mills plant and warehouses were destroyed recently by fire at a loss of approximately \$300,000. No one was injured.

The plant, situated about ten miles east of Greenville, was about 65 years old and had not been operated as a textile unit in recent years. It was used, however, as a storage place and quantities of cotton waste, merchandise supplies and other material were destroyed. There were 600 bales of cotton in the warehouses.

The fire was well underway when first discovered about dawn. The Greenville and Greer, S. C., fire departments went to the scene but the blaze had destroyed the buildings by that time.

Atlanta Club Officers Inducted

ATLANTA, GA.—William M. Babcock, representative in the Southeast for Talon, Inc., was inducted as president of the Atlanta Textile Club, at a recent meeting of the organization at the Atlanta Athletic Club.

Mr. Babcock succeeds J. Harry McGinty, Jr., of J. P. Stevens & Co. Previously he was chairman of the entertainment committee for the club.

William I. Hudson, Jr., of Muscogee Mfg. Co., and Reeves Bros., assumed the vice-presidency; J. Louis Lynch of Joshua L. Bailly Co., took over the secretaryship and Alan A. Clow of A. M. Tenney Associates the treasurer's office.

Restrict Mill House Rent Increases

COLUMBIA, S. C.—Increases in maximum rents on housing accommodations regularly rented to employees of the landlord, particularly mill village houses, were restricted in instructions issued area rent control directors recently by the state Office of Price Administration. The ruling would permit rent increases only when relations between landlord and tenant-employee are terminated and the accommodations are offered to the general public.

Jacobs Mfg. Corp. is Now Using Women on Men's Jobs

An innovation in the woodworking industry, the employment of women to do the work of men being called into the armed forces, is proving highly successful at the E. H. Jacobs Mfg. Corp. plant in Charlotte, N. C., according to W. Irving Bullard, the firm's president.

The Jacobs Corp. manufactures and sells hardwood picker sticks and other attachments for looms and spinning frames. Now that the textile industry is racing against time to provide essential war materials the corporation feels that it is highly important to make these hardwood supplies available to the mills whenever they are needed. For that reason, it has begun training women to operate the machines that make these textile supplies.

At the plant, for example, a man is now working across a large single surfacing heavy hardwood planer from his wife, whom he is instructing in the operation of that machine. Some 20 feet away another young man is working at a similar planer with his sister. The two women, both of them already efficient at their new tasks, expect to be able to keep the planers operating when the two men go into the Army.

At another machine in the large, modern plant, another woman is operating a boring machine that makes the holes in the hickory picker sticks. She is a newcomer to that job, but already she is operating the machine like a veteran.

"We feel that it is our duty to keep this plant operating at full efficiency," said Mr. Bullard. "The textile industry expects us to provide hardwood replacement parts for the textile industry's machinery. The mills are running now at top speed supplying materials for the armed forces and every time a mill's machine breaks down it means that just that much time—and production of vitally needed materials—is lost. We are determined to be able to maintain our production program and we are taking steps to see that lack of efficient labor does not defeat us. Many of our men have been going into the service and some now working with us are expecting to be called. For that reason we decided to try a new experiment in the woodworking industry—that of employing women to operate some of our highly specialized machines. And now that we have tried them we find they are well adapted to the work and are doing excellent jobs."

For one thing, said Mr. Bullard, women have a more deft touch, as a rule, than men, and this serves them excellently in the various woodworking operations required in making hardwood replacement parts for textile machinery. He is confident that the replacement of men by women when the men are called into military service would not result in the lowering of the plant's production.

Teat Will Represent Troy Whitehead

Alvin Teat has been appointed South Carolina sales and service representative for the Troy Whitehead Machinery Co. of Charlotte, N. C. Mr. Teat has been connected with the textile industry for about 20 years and is widely-known among Southern manufacturers. He will continue to maintain headquarters at Greenville, S. C.

The APRON

OF GREATER UNIFORMITY



- The dependable uniformity of our Textile Aprons has earned an enviable reputation, and a steadily growing demand for them in the textile field. They are gauge-tested for UNIFORMITY at every point; not only for uniformity with other aprons in the same shipment, but for uniformity with previous shipments, or with your specifications. They FIT!

For quicker delivery and low prices on open and closed type leather-aprons, for all long-draft systems, write—

**TEXTILE APRON
COMPANY**
EAST POINT, GEORGIA
J. B. KENNINGTON, OWNER

University Establishes Fiber Research Laboratory

KNOXVILLE, TENN.—Manufacturers of cotton products in America now have a "trouble shooter" who will help them find the causes of faulty cotton goods, the University of Tennessee Fiber Research Laboratory in Knoxville announced recently.

The laboratory offers to apply its research facilities in any problem of cotton manufacturing dealing with the physical properties of cotton fiber. Dr. Kenneth L. Hertel is in charge.

"The new service was started when a manufacturer came to us to find out why the cotton goods he produced were not as durable as he thought they should be," explained Dr. Hertel. "He believed the trouble was in the physical properties of the cotton fibers going into those goods, and our fiber-testing instruments made it possible for us to determine whether that was the trouble."

Since all cotton manufacturers are confronted with similar problems, and since no such "trouble-shooting" services have been available, Dr. Hertel said the University of Tennessee Fiber Research Laboratory is willing to fill this need in the interests of the South's major crop.

The physical characteristics such as length, fineness and strength of fibers differ greatly between one variety of cotton and another, and the manufacturer must determine the variety most effective for the type of product he is making, said Dr. Hertel.

The University of Tennessee Fiber Research Laboratory established a cotton-testing service which includes two new fiber-testing instruments developed by Dr. Hertel. One is the fibrograph, which measures average fiber length, and the other is the arealometer, which measures fiber fineness. The Pressley instrument, developed by Prof. E. H. Pressley of the University of Arizona, is being used in testing strength of fibers.

Manhattan Rubber Has Modern Hospital

Realizing that immediate and proper medical care for minor as well as major injuries and illness is necessary for the welfare of employees as well as for the proper functioning of an industrial plant, in 1908 The Manhattan Rubber Mfg. Division of Raybestos-Manhattan, Inc., was the first industrial plant in the Passaic, N. J., area to set up its own first aid hospital.

Today, Manhattan's new 14-room hospital is one of the most modern in New Jersey. It is staffed by a physician, five nurses, a secretary, and a clerk. Equipment is of the latest type and includes examining, treating, operating and recovery facilities.

Manhattan's employees are encouraged to visit the hospital if they sustain even a minor scratch or similar injury to prevent infection. Employees are given periodic physical examinations and the hospital facilities are also available for the treatment of minor non-occupational illness.

Safety is a by-word at Manhattan and a continuous program of education in safe working practices is carried on. American Red Cross first aid activities are also given every encouragement. Four first aid detachment stations have been set up in the plant to function in the event of a disaster, and first aid instruction classes are made available to all employees.

Whitin Ceremony Commemorated

The Whitin Machine Works, Whitinsville, Mass., has issued a 24-page booklet commemorating the presentation of the U. S. Maritime Commission "M" Pennant and the Victory Fleet Flag to the company Nov. 7, 1942.

Maritime Labor Merit Badges were also presented to all Whitin employees at the ceremony. The booklet includes pictures and a running account of the presentation.



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Trade Mark

Latest Development in LOOM STRAPPING

Once again we announce a FIRST—in our newly developed, thoroughly tried and tested loom strapping TEXTORIC—approximately 30% stronger than our original TON-TEX.

Years ahead of its time, due to recent rapid developments in plastic and chemical fields, TEXTORIC requires no critical materials in its construction. No rubber of any type is used.

There are no limitations on adequate future supply. . . We suggest tests to meet your own particular loom strapping requirements.

ANY WIDTH
ANY LENGTH
ANY THICKNESS
ANY PUNCHING



W. D. DODENHOFF COMPANY

619 RUTHERFORD STREET
GREENVILLE, SOUTH CAROLINA

Fine Cotton Goods Ceilings Broadened To Cover 114 Weaves

(Continued from Page 22)

For lawns, the maximum cents per pound price is 75c, for broadcloths 60c, for voiles 75c, for domities 75c, for marquissettes 65c and for other fabrics 50c.

If a seller seeks a special maximum price for a particular fabric, he may make such a request of OPA in writing, giving a complete description of the fabric, including a statement of the price requested. Such seller must continue to use the poundage price until OPA has issued a special ceiling.

Any person who has made or intends to make a Government contract and who thinks that a maximum price established by Regulation 11 may impend production of material under that contract which is essential to the war program may file an application for adjustment in accordance with Procedural Regulation No. 6.

Invoice requirements contained in Schedule 11 are continued in the new regulation.

Manufacturers of four types of cotton goods were given cents-per-yard ceilings Jan. 6 by the Office of Price Administration at the same time that a pricing method was supplied for cotton products whose maximum prices cannot be determined through the regular formulas of the "cotton products" regulation. Provision was also made for one manufacturer to price one type of shoe fabric sold through a regularly established jobbing department.

Two new fabric groups were added to Maximum Price Regulation No. 118—Cotton Products—through Amendment No. 15, effective Jan. 11, 1943. These were woven curtain nets and pinchecks—the latter used for mattress and bunk covers and for women's work clothing. The amendment also set prices for finished meads cloth—the backing on adhesive tape—following a previous ceiling for this cloth in the "gray" or unfinished state. OPA also supplied ceilings for one additional manufacturer of yarn-dyed slack suiting.

Through the provision of additional cents-per-yard ceilings covering 73 constructions of these four types of cloth, OPA continued its policy of establishing specific ceilings in place of formula prices for the purpose of simplifying the pricing problems of the cotton textile industry. In all instances, the prices established maximums for the same or comparable fabrics.

An amendment, the 11th, to Revised Price Schedule No. 35 for carded gray and colored yarn cotton goods, was issued to become effective as of last Feb. 7, 1942. It revises the wording of parts of its Section 1316.61 to reflect the original intent and interpretative rulings on this price schedule, which are that the prohibition contained in the order against altering contracts entered into prior to Oct. 21, 1942, is not intended to be applicable to certain "open price" contracts which by their terms provided for a fluctuating price.

The amendment changes the first unnumbered paragraph in Section 1316.61 of RPS No. 35 by inserting the words "and only when the sale or contract of sale establishes a specific price for the entire contract" after the words "above-mentioned date."

It also amends Paragraph (A) of the same section by inserting the words "establishing a specific price for the entire contract" after the words "sale or contract of sale."

"3-6-7?"

RUSH UP THE RESERVES!"



A good general always has troops in reserve for an emergency. For similar reasons many mills depend on Ashworth for card clothing products.

3 FACTORIES which assure an uninterrupted supply of card clothing. If one factory is temporarily disabled, another factory can "pinch hit" for it.

6 REPAIR SHOPS which facilitate convenient and prompt repairs and which insure you against emergencies.

7 DISTRIBUTING POINTS which speed up deliveries of those items we have in stock and facilitate personal contacts when the mill has card clothing problems.

3-6-7 is also your assurance of dependable quality, for we are "Pioneers in Card Clothing."

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WOOLEN DIV.

AMERICAN CARD CLOTHING CO.

Fall River *††	Worcester *†	Philadelphia *††	Charlotte ††
Greenville ††	Atlanta ††	Dallas ††	(Textile Supply Co.)

*Factory	†Repair Shop	††Distributing Point
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Card Clothing for Cotton, Wool, Worsted, Silk and Asbestos Cards and for all Types of Napping Machinery • Brusher Clothing and Card Clothing for Special Purposes • Lickerin Wire and Garnet Wire • Sole Distributors for Platt's Metallic Wire • Lickerins and Top Flats Reclothed.

Have You Checked Your Lickerin Speeds?

Before you increase your cylinder speed to get more production, why not check your lickerin speeds. You can be losing from 3 to 10% in production due to oil-soaked slack belts.

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A Great Hotel A Great Name

WLB Rules in Burlington Case

BURLINGTON, N. C.—The War Labor Board has ordered higher wage minimums and inclusion of a maintenance of membership clause in contracts with unions at Plants A and B of the Burlington Dyeing & Finishing Co. But both plants are closed.

Of the company's 44 plants only two were involved in the WLB case. The company closed both Nov. 26 after the panel recommended pay increases to the board. The management said it closed the plants because of changes in the type of business it handled.

The CIO Textile Workers Union, which won bargaining rights at those two plants in 1939 and has been negotiating with the company since then, contended the shut-down was inspired by anti-unionism and asked that the board order the plants reopened or take other punitive action. The board's directive ignored the demand, except that its order shall be effective when the plants are reopened.

The order provides a starting rate of 45 cents and minimums of 60 cents for men and 50 cents for women after twelve weeks. A maintenance of membership clause also was ordered.

OBITUARY

B. F. BARNES

B. F. Barnes, Southern sales representative for the Victor Ring Traveler Co., died recently at Atlanta, Ga., in his 57th year. Mr. Barnes had been associated with the Victor Ring Traveler Co. for 20 years, and previous to that time was purchasing agent for the Fulton Bag and Cotton Mills. He is survived by his wife, two sons, a daughter, three brothers and three sisters.

CLIFF INGRAM

Cliff Ingram, 53, cotton buyer, died recently at the Vereen Memorial Hospital, Moultrie, Ga., after an illness of ten days. During the past ten years he had been head cotton buyer for the Moultrie Cotton Mills. Mr. Ingram leaves his widow, two sisters and three brothers.

VAUGHN NIXON

Vaughn Nixon, president of the Atlanta Woolen Mills, Atlanta, Ga., died recently, aged 63. Mr. Nixon had been president of these mills for about 20 years, having succeeded his father, William M. Nixon, at his death. He was a member of several organizations in Atlanta, and was prominent in civic affairs. He leaves his widow, two daughters and a son.

GUS F. ROBERTS

Gus F. Roberts, 71, for many years one of the leading cotton mill superintendents in the South, died Jan. 14 at the Baptist Hospital, Winston-Salem, N. C.

Mr. Roberts was born at MacIntyre, Ga. His son, Roscoe O. Roberts, is now superintendent of the preparatory department at Lincoln Mills, Huntsville, Ala.

WPB Standardizes Textile Bags

WASHINGTON.—The War Production Board has standardized textile and paper shipping bags.

Beginning April 1, manufacturers, processors or packers of beans, cement, chemicals, foods, fertilizer, flour, meal or cereals, nuts, plaster, potatoes, rice, seeds, starch or sugar may pack their products only in bags of specified sizes.

The permitted sizes (based on weight of content) include 2, 5, 10, 25, 50 and 100 pounds or over. Additional sizes were allowed as follows: Cement 94 pounds, plaster 60 or 94, potatoes 15, seeds one or two bushels.

The purpose of the standardization of sizes, WPB said, was to relieve bag manufacturers and users from the necessity of carrying an inventory of many different types and weights of paper and textile bags.

Cotton Use Rise Extended

WASHINGTON.—The Census Bureau has reported that cotton consumed during December totaled 935,511 bales of lint and 108,113 bales of linters, compared with 913,038 bales of lint and 113,728 of linters during November and 888,379 bales of lint and 109,945 of linters during December a year ago.

Cotton on hand Dec. 31 was reported held as follows: In public storage and at compresses, 13,576,030 bales of lint and 84,128 of linters, compared with 13,637,120 and 79,371; and 13,709,883 and 138,378.

Cotton spindles active during December numbered 22,887,072, compared with 22,948,248 during November and 23,062,264 during December a year ago.

Penick & Ford Men Get Commissions

The following Penick & Ford Southern sales and service representatives have received commissions and promotions in the armed services:

Glenn M. Anderson, Southern technical service representative, has been commissioned an ensign in the Naval Reserve.

Scott Poer, sales representative, has been promoted to lieutenant in the Naval Reserve.

W. R. Brown, sales representative, has been promoted to captain in the Army Air Corps.

Announcement that Tommy Nelson had been commissioned a first lieutenant in the U. S. Army was made in the last issue.

Interpretation of Machinery Order Given

No authorization is needed for production or purchase of repair or maintenance parts for textile machinery, the War Production Board ruled Jan. 11.

An interpretation of Order L-215 (textile machinery) makes it clear that limitations on the order apply only to parts produced or purchased for improving, expanding or adding to machinery.

Parts needed for repair or maintenance purposes can be purchased without regard to provisions of L-215, and no authorization form or other application need be filed with WPB for this purpose.

ONYX

No crystal ball is needed to learn the future of Rayon. Through such team work as exemplified by Onyx Research—Onyx Laboratories—Onyx Production, in close cooperation with mills and commission dyeing and finishing plants is determined the future of Rayon, particularly in the hosiery field. Experience, work and patience well directed, are gradually surmounting many obstacles. If you have a problem in Rayon, perhaps Onyx can be of help. Your inquiries are solicited.

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*John: -
Douglas #505 Dextrine
is a high soluble white
Dextrine used for numerous
finishing purposes.
Believe it has a wider
range of application
than the product we
are using. Jim*

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Bleachers, Dyers, Mercerizers and Finishers will find Burk-Schier Wet Processing Agents efficient and economical for scouring, bleaching, dyeing, softening and finishing yarns and piece goods. Your inquiries will receive prompt attention.

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BURK-SCHIER CHATTANOOGA, TENNESSEE **BURK-SCHIER**
MANUFACTURING CHEMISTS FOR THE TEXTILE INDUSTRY

Wool Research in U. S. and England Points to Improved Product

(Continued from Page 20)

was shown to alkali solubility.

2. *Modified Wool is More Resistant to Acids:* After being treated with acids, modified wool showed greater stability to acids than untreated wool. (This was noted as of special importance, since degradation which may occur when wool is carbonized, acid-dyed or acid-fulled may be greatly accentuated when the material later comes in contact with alkali, as in laundering.)

3. *Modified Wool is More Resistant to Reducing Agents:* Subjecting untreated wool to the action of reducing agents such as sulfites, with which papermakers' felts come in contact, and dithionites, which are used in dyeing wool with indigoid colors, tends to make wool extremely susceptible to the action of alkali; but the modified wool was found to be considerably less affected by reducing treatment than was the untreated wool.

4. *Modified Wool is More Resistant to Oxidizing Agents:* The deleterious effects of oxidizing agents such as peroxide bleaching chlorine treatment, and exposure to light and air while the garment is being worn, were greatly diminished in the tests with modified wool.

5. *Modified Wool is More Resistant to Staining by Heavy Metals:* Wool is easily stained by contact with metals, as by the metal fasteners sometimes used on woolen clothing. Tests showed that the extent of staining by solutions of certain salts of iron, copper, silver and lead was considerably greater on untreated wool than on certain of the modified wools. Most of the modified wools were stained much less by a solution of lead acetate.

6. *Modified Wool is More Resistant to Enzymes, Moths and Carpet Beetles:* Modified wool showed greater stability to biological agents than did the untreated wool, because moth larvae can digest wool only after breaking the disulfide cross-linkages by the action of a reducing agent present in their intestinal tracts. Thus, by injection of the new cross-linkages which are very resistant to reducing agents, far more stability to biological agents was observed. It was also observed that stability to moth-proofness is not removed by laundering or dry cleaning, since it is built into the molecules as an integral part of the chemical structure. Carpet beetles damaged both the untreated and modified wools, but far less damage was observed in the modified wools.

Research along similar lines, especially in regard to wool's well-known tendency to felt and shrink, has been conducted during the past five years by the Secretariat and is now proving its value in Britain's prosecution of the war. One of the original moves of the Secretariat was the endowment of a laboratory in Torridon, England, and the inauguration of research fellowships at Cambridge and Leeds Universities. The Secretariat undertook the Torridon research as one of the sponsors of the Wool Industries Research Association.

In 1939, with the outbreak of war, research was called upon to meet one of the most serious problems ever faced by the wool industry in England. The soldiers had to be well-clothed. The Ministry of Supply called upon the Wool Industries Research Association to set up basic standards and tests to which garments purchased by the British Government for the armed forces must comply.

The association, in consultation with the industry, then established the "Warnorm" standard and all knitted woolen garments purchased by the Government were required to bear the "Warnorm" label certifying that they conformed to the non-shrinkage requirements.

At the present time, four types of non-shrinkage processes are in use in Britain. Two are of the so-called dry type and two are of the wet type. The development of these processes has furnished a means for making the most economic use of total available wool resources, not only resources of raw wool but of labor and the available plant space linked with it in the manufacture. Wool that did not shrink made better and more lasting garments, and the additional labor and plant space has been used for other war necessities.

But British manufacturers have not stopped here. As are all woolen manufacturers, they are conscious of the civilian market after the war and the protection of wool from the inroads of the synthetic fabrics. If the finer wools shrink more, shrinkage control will enable these fine wools to be used in underwear and socks with resulting increased comfort for the civilian consumer.

Up to the present, shrinkage has been one of the greatest obstacles in the manufacture of light, washable woolen garments for outerwear. In view of the progress already made, however, colored flannel skirts, slacks, shorts, children's dresses and suits and other lightweight garments for summer wear can now be produced on competing terms with other fabrics of washable types. Yarns for sweaters and other knitted goods may also be treated with the same result.

With billions of dollars being spent for war clothing, under demands for minimum waste and maximum efficiency, it now seems apparent that the wool industry is definitely conscious of the post-war problems it may have to face and that it will emerge from the war better able to solve these problems as a result of the greatly stepped-up tempo of research now being conducted.

Winslow Heads Atwood Engineers

A. E. Winslow has been appointed chief engineer of The Atwood Machine Co., Stonington, Conn., builders of Atwood twistors, winders, redraws, etc., for the production of rayon, nylon, silk and combination yarns.



A. E. Winslow

Mr. Winslow is a textile machinery engineer of wide experience. He has been with the Atwood engineering department for some time and was previously in charge of the long draft division of engineering of the Whitin Machine Works, with whom he was associated for five years. Prior to that he was an engineer with the Saco-Lowell Shops.

Many evidences of Mr. Winslow's creative engineering ability and textile-mechanical background are to be found in the Atwood machines developed just prior to the war as well as in the Atwood contributions to the war program which recently won for the company the Army-Navy "E" award.

John P. Maguire & Company

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CONFIDENTIALITY ADVISED

**War Production Board
To Retain All Textile
Units for Time Being**

WASHINGTON.—The division of responsibility concerning textiles and fibers between the Department of Agriculture and WPB, under Executive Order 9280, will be worked out on a reasonable basis, it was stated Jan. 12 in an official outline of the work to be done under this executive order, by WPB Chairman Donald M. Nelson.

Order 9280 established a control system for the production and distribution of food; among the "foods" defined by the order are cotton, wool, hemp and flax. Under the present division between the two Government agencies, most of the edible food units or parts of food units in WPB are being transferred to the Department of Agriculture.

This leaves all the textile units with WPB at present, but it is understood that an announcement concerning fibers will be made as soon as possible, and that it will continue to give the Department of Agriculture responsibility for production of crops and livestock essential to textiles and leave responsibility for the manufactured products with WPB.

FOR BEST RESULTS
USE TEXTILE BULLETIN
WANT ADS

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Cotton Goods Market

NEW YORK.—Issuance by the Office of Price Administration of Maximum Price Regulation No. 11, covering the fine cotton gray goods, was generally disappointing to most of the market.

Both buyers and sellers seem to think that the newly-established prices on these numbers will not do much to speed them toward consumer channels, nor act as an incentive to mills to produce numbers that have been badly needed, because of the low profit margin involved.

Fine goods dealers have not been very enthusiastic over the prospects of obtaining any large quantities of merchandise because of the new price ceilings. While many felt that some styles would be released, the general feeling was that the quantities involved would be limited. Selling houses were reticent about making any statements as to their plans, and buyers as a result are awaiting developments to just what effect the new ceilings will exert.

Background for the feeling that not much is likely to be done was the fact that in instances where quotations are reduced under the new regulation, mills failed to make any allotments in order to take advantage of the higher price permissible up until today on these styles. This leads many buyers to be convinced that mills are sold up and have not been accumulating goods pending the issuance of the new quotations.

Concentration on vitally needed military fabrics occupied the major interest in the cotton gray goods market, with the result that the first week of the new year was not productive of any wide movement of goods to civilian channels. The continued tightness in all sections of the gray goods market was emphasized by the desire of buyers to accept deliveries heretofore unacceptable. Demands for all types of fabrics continue far in excess of the supply; and with mills sold ahead as far as they desire to go the amount of trading was naturally held down to a minimum.

The cotton gray goods market generally has presented a dismal picture, with selling houses indicating that buyers are determined in their quest for goods, despite the lack of successful results.

In some sections reports were heard of small quantities of goods being let out on high priorities and for civilian use, but no details as to the types involved were available. Scattered lots of print cloths are understood to have figured in these deals.

Talk in the gray goods market invariably turns to the demands that will be made upon mills to supply the Lend-Lease program. The principal interest in the market is in strong attempts to place business.

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Cotton Yarns Market

PHILADELPHIA.—In spite of the fact that individual sales are larger, total carded and combed yarn tradings for this month are below corresponding December figures.

Reports of business offered on the market, without takers, seem to indicate that some spinners are doing all they can not to accept orders which, when deliveries are due, they may not be able to fulfill as planned.

However, the reports have it that a few spinners have been able to protect themselves well into the second quarter. It also appears that a good amount of cotton sale yarn is being disposed to civilian users, of which no record is ever made available. Local estimates put this amount at about 20 per cent of the total output of sale yarn.

Government requirements have drawn in a substantial part of the first quarter's sale yarn production, either directly or to serve those who have to substitute because of inability to compete with needs of the armed services. As for combed yarns, the Government already is taking regularly more than one-half of the sale yarn spinners' deliveries, and this ratio is expected to increase.

Sale yarn supplies, both carded and combed, thus are subjected to a three-day pull, including (1) our own military and naval requirements; (2) the yarns to be used for War Aid and Lend-Lease purposes; and (3) the minimum supplies that will be needed to support civilian morale. As to the latter, it can be relied on that department store and other large retail interests will exert their utmost influence in order to assure themselves of "soft" goods with which to replace the volume and profits they would have had from "hard" items they no longer can sell.

The prospective purchase by the Government of a large quantity of cotton-warp, 25 per cent wool blankets, for Army and war aid purposes, is again being discussed here, as it would affect cotton yarns. According to market reports, the Army will drop the cotton-filled comforter. Partly, this would permit looms that were making 64x60, 5.35-yard gray print cloth for the outside covering of this comforter to be transferred to 60x56, 3.60-yard cloth for raincoats, the latter being a more essential item.

Government buying agencies are said to have noticed a deterioration in the quality of various cotton and other textile items during the latter part of 1942, which were delivered against military contracts placed in this industry earlier during the last year. It is said to be recognized that lapses in quality are mostly beyond the control of manufacturers. Thus far, nothing has been said about whether carded and combed cotton yarn furnished on Government orders has fallen below the standards.

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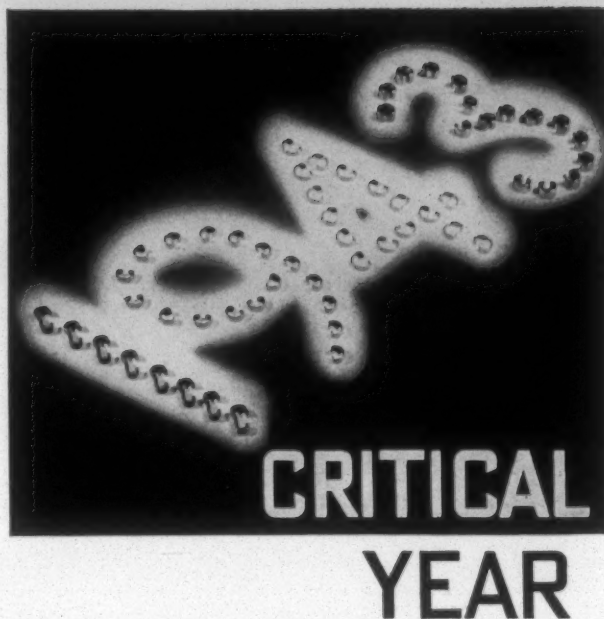
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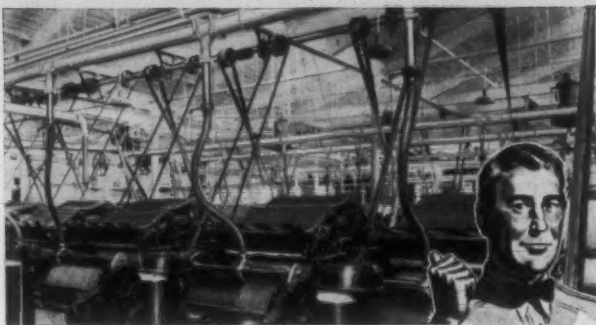
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The Processing of Synthetic Fibers and Fabrics

(Continued from Page 31)

swelling the viscose rayon so that the fibers will possess a uniform affinity for the various dyestuffs that may be used. Rayon goods properly causticized will show a more uniform take up of naphtholation for printing of naphthols and give more level dyed shades on developed colors than goods not properly causticized.

Shrinkage Control

With the great increase in heavily-pigmented viscose yarns, the question of shrinkage control becomes more of a variable due to the fact that the heavily pigmented yarns and goods are more difficult of penetration and thorough equalization and setting of the fabrics.

The heavily-pigmented yarns require a greater use of quick-acting penetration agents plus padding of gray goods both in the desizing and causticizing operations. It has been found necessary to pad these heavily-pigmented goods in the dyeing operations on some shades. Otherwise the final shade will show a barre effect due to the varying dyestuff affinity of the rayon fibers in goods.

The heavily-pigmented viscose may require further treatment before it can be dyed level shades free of shadowy barre effect. Some rayon dyers have found that a preliminary half bleaching operation will swell the viscose fibers and help equalize the dyeing affinity of these fibers.

Several pre-bleaching procedures have been found advantageous for helping to equalize these pigmented fibers. These methods are:

1. (a) Hydrogen peroxide and sodium pyro phosphate.
(b) Hydrogen peroxide and soda ash.
2. Textone and acetic acid.

The use of a mild alkali such as sodium pyro phosphate or soda ash in with the peroxide bleach has proven more beneficial than using sodium silicate as an alkali aid in bath.

If goods showing this barre effect have five per cent or more of acetate rayon fiber in their construction it is advisable to use the textone and acetic acid bleaching method or eliminate the use of mild alkalies in the peroxide bleaching method.

The pH of the textone processing bath can be kept at around five to six and run at a light boil both on goods with or without acetate rayon fiber present. While on the peroxide bleach, the all-rayon goods can be bleached at 180-200° F. with a pH of approximately 10 to 11 if acetate or aralac is present the pH of bath must be kept at eight to nine and a bleaching temperature of 160-170° F. on acetate and 140-160° F. for aralac. No textone bleach can be used in goods containing aralac, as it injures it similarly as wool or silk.

Dyeing Rayon Fabrics

Rayon fabrics may be dyed by padding, dyeing on dye-beck or on jiggs. To date there has not been any extensive dyeing on continuous ranges due to the varying sizes of dye lots as compared to cotton goods. The following factors govern the selection of the dyeing methods used for processing filament and spun rayon fabrics:

1. Weight and construction of goods.
2. Depth of shade.

3. Fastness requirements for fabrics.
4. Class of dyestuffs to be applied.
5. Solubility of dyestuffs to be applied.

Spun rayon fabrics can be padded on the lighter shades with direct colors, but on medium to heavy shades it is necessary to dye in the dye-beck to obtain the desired penetration and levelness in dyeing.

In the application of developed colors a good range of very soluble types can be selected. The dyeing of heavy developed shades can be carried out by padding in concentrated pad liquors with penetrant, then batching on roll and running on the jigg for four to eight ends with penetrant, sodium pyro phosphate and salt in bath to level up shade, then dropping bath, rinsing, diazotizing and developing on jigg.

By using a combination of padding-jigging operations on heavy developed shades, the dyeing time can be reduced 20 to 40 per cent over straight jigg or box dyeing for similar depth developed shades.

This same story applies to the dyeing of heavy shades using fast-to-light direct colors and aftertreatable types, but experience has shown that a majority of the better fast-to-light and aftertreatable colors possess poor solubility and for this reason are not suitable for padding in heavy shades.

On these types of colors, the best results are obtained both on levelness, penetration and fastness of final shade by dyeing in the dye-beck. The rayon goods in the dye-beck are exposed to a greater degree to the action of live steam in the dye bath and the action of the dyeing assistants in aiding the dyestuff solution to penetrate and exhaust itself quickly for level dyed results than on jigg.

On the jigg the goods under process are in the actual dye bath only a fraction of the dyeing period, so the actual dyeing on a jigg must take place to a large degree while the goods are batching. For this reason the dyestuffs used for jigg dyeing must be of very soluble nature with excellent level dyeing and exhausting properties.

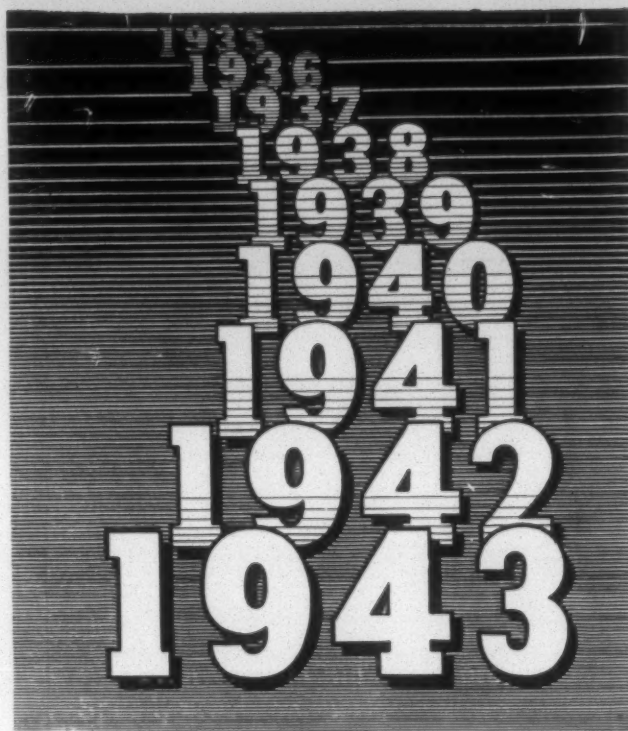
This fact shows why colors used on box or dye-beck work can be selected on a money value basis to a greater degree than those on jigg work where colors must possess so many more exacting properties.

New Bleaching Process Devised

Du Pont chemists have devised a new continuous bleaching process which turns cloth white in two hours at rates up to 200 yards per minute. Hydrogen peroxide is the bleaching agent. By means of the new process, applied in seven states, cotton goods for soldiers' and nurses' uniforms, shirts, sheets, towels, handkerchiefs and other military textiles are being bleached at unprecedented speeds.

T. W. Bridges To Direct School

BELMONT, N. C.—Tilden W. Bridges, director of the Spray, N. C., vocational school for the past four years, has been named director of the new State Textile School, which is now being constructed. He has assumed his new duties and is overseeing the installation of equipment preparatory of opening the school in a few months.



Each Year a Better Check Strap Leather ...Through Research



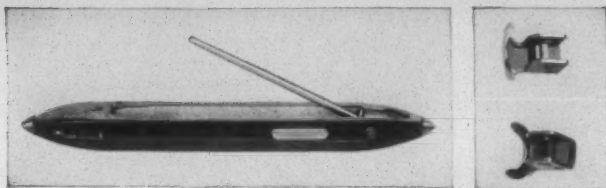
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Textiles Flame-Proofed By New Chemical Compound

With the possibility in mind of legislation requiring proper flame-proofing of drapes and other decorating materials in all public places, as a result of the disastrous Boston night club fire, textile finishers will be interested in a flame-proofing chemical compound developed by Quaker Chemical Products Corp. of Conshohocken, Pa.

This product, being marketed under the name "Quaker Pyr-E-Pel," is a white, crystalline powder completely soluble in hot or cold water. For flame-proofing textiles, a solution of one part Quaker Pyr-E-Pel in from four to ten parts of water (by weight) is used at a temperature of 120° to 160° F. The fabric is passed through this solution and dried in the usual manner at approximately 200° F.

It is claimed that Quaker Pyr-E-Pel is insoluble in all oils and solvents, hence is not readily washed out when the treated fabrics are dry-cleaned.

According to its manufacturers, this product is not affected by liberal amounts of acid or alkali. It is compatible with starches, dextrines and gums and with certain waxes and sulphonated oils. It will not coagulate colloidal solutions and can be used in the same bath with most finishing materials and pigments.

Quaker Pyr-E-Pel is said to be equally effective on cotton, rayon, wool and all other types of textiles. While its use imparts body and weight to a fabric, it does not stiffen or adversely affect the "hand" of the treated material. Quaker Pyr-E-Pel may also be used to flame-proof paper and other combustible materials capable of saturation, it is claimed.

New Sales Training Booklet Is Out

"There'll be no peace without victory—so to speed the first we must speed the second!" is the opening sentence in a new sales training booklet just prepared by Pacific Mills—*How to Sell More Peace Goods*. The booklet, addressed to the salesgirl behind the yard goods counter, has been prepared particularly to help make her job of war-time selling easier. At the same time, it shows how she can help her customers spend money wisely so that essential war materials may be conserved.

The booklet, which should be a boon to the new salesgirl, and to sales training directors of retail stores, gives complete information about the Pacific Facta slip. This informative label has been developed as a result of replies to questionnaires sent out to thousands of women asking what type of information they wanted about fabrics. It gives the tested degree of colorfastness of the fabric being sold—both to washing and to light, in accordance with standards set up by the Government. Other facts, such as fastness to crocking, shrinkage expectancy, etc., are given for individual fabrics as necessary.

This publication is the second in a series of wartime booklets published by Pacific Mills. The first—*How Can Informative Labeling on Fabrics Help Me Contribute to the War Effort?*—was prepared for general consumer distribution. It is also a continuation of Pacific Mills' program of advertising keyed to wartime selling and the conservation of materials.

1942 Output of Rayon in U. S. Is Up Substantially

Production of rayon in the United States in 1942 registered another substantial gain as compared with 1941, due to greatly increased demand for both civilian and war use.

Based upon preliminary estimates, compiled by the *Rayon Organon*, published by the Textile Economics Bureau, total deliveries of rayon by American mills last year (yarn plus staple fiber) exceeded the previous record set in 1941 by five per cent. Tentative estimates indicate that filament yarn deliveries in 1942 were four per cent above the former 1941 record, while 1942 staple fiber deliveries are estimated to be eight per cent above the 1941 level.

"Rayon yarn really started to go into direct war products during 1942," says the *Organon*. "The major portion of the rayon going into such products was of the viscose and cuprammonium types. In 1943, even greater quantities of these yarns will find their way into war uses.

"The use of acetate yarn and rayon staple fiber in war products in 1942 was small, but a substantial increase in their use for both military and naval products during 1943 is anticipated."

"In addition, substantial quantities of rayon yarn and rayon finished goods are required for export to the Southern republics, as well as foreign relief and rehabilitation purposes.

"The civilian demand for rayon in 1942 was of two separate and distinct types. First was the 'regular' or

former outlets for rayon goods. These were principally the civilian-type goods made and sold to consumers before mid-1941 when the rayon supply began to be diverted to new outlets of various kinds.

"The second type of 1942 civilian demand for rayon," adds the *Organon*, "was an induced demand made necessary by shortages in other civilian materials, as created by the war. Thus beginning in August, 1941, and increasingly during 1942, rayon took over essentially all of the former civilian products made of silk, as well as civilian goods supplied by nylon. Rayon is also a part of the wool replacement program.

"Thus, in civilian-type goods, rayon not only has had to fill the demands of its former users, but also has taken on a host of other civilian products formerly made of other fibers. The rayon industry has been essentially in a 'sold out' position since 1939, and to say that this additional demand has put a strain on the rayon industry during 1942 is to state the case mildly."

For the year 1942, it is estimated that the new rayon users took about 25 per cent of the rayon available, which means that the former outlets took the remaining 75 per cent of the total rayon produced (yarn plus staple fiber). In 1943, the new and the former users of rayon probably will share the available rayon supply almost equally.

This indicates that the rayon industry is a vital part of the war effort, both *directly* in actual war goods produced, and in our important export market and *indirectly* as the fiber that is carrying on an increasingly vital role in the civilian economy. This explains why the Government is encouraging high rates of operation for the rayon industry today and in the future.

MINEROL

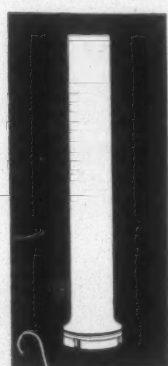
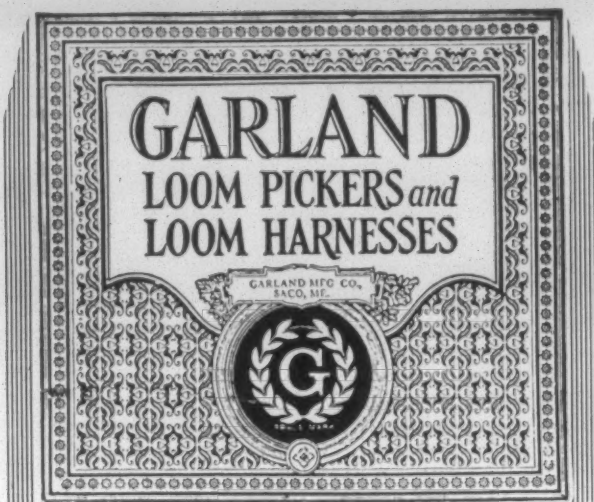
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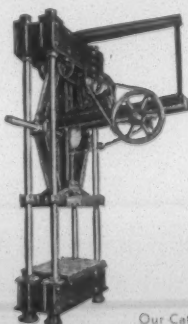
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Du Pont Laboratory and Pilot Plant Awarded Army-Navy "E"

WILMINGTON, DEL.—Standing where nylon was born, Brig. Gen. Benjamin W. Chidlaw of the Materiel Command of the Army Air Forces declared, in presenting the Army-Navy "E" flag Dec. 29 to the Nylon Research Laboratory and Pilot plant of E. I. du Pont de Nemours & Co., that "in a very real sense, the research laboratory is the first line of defense, the first front, the point where victory begins."

Addressing the employees and officials who brought nylon into being and have made it available 100 per cent for vital military purposes, the General said the Army-Navy "E" "marks every one of you as a faithful and devoted contributor to the United Nations' ultimate victory."

He emphasized that the war was being fought not only in the Solomons, New Guinea and North Africa, not only with airplanes, tanks, guns and ammunition, but was "being fought with test tubes and retorts, with calipers and micrometers, with ability and brains."

"It is being fought right here in Wilmington," he said, "right here in your own plant. It is being fought by you."

The General declared the Army and Navy needed nylon quickly and in large quantities, that it has been and will continue to be tremendously important to our air forces.

"You have done much," he asserted. "You will do more. For the promise, no less than the performance, your Army, your Navy, your country, are grateful. . . . You may work with the knowledge that what you have done and what you are doing will one day be a factor contributing to Allied victory parades through the streets of Berlin and Tokyo."

Textile Transportation Discussed

Plans for eliminating the practice of cross hauling and circuitous routing in the cotton, wool and leather industries were discussed recently at a joint meeting of three transportation industry advisory committees with officials of the Textile, Clothing and Leather Division of the War Production Board. The committees represented the cotton goods, wool and worsted goods, and the leather and shoes industries.

Other transportation conservation measures considered at the meeting included more efficient packaging and better space utilization, expeditious handling of equipment, diversion of freight to other types of transport, and maximum loading of carload and trap car freight.

Also discussed as basic to the conservation program was the problem of meeting greatly increased transportation requirements in 1943 for the three industries involved.

In an effort to develop more factual data on the overall problem of meeting the 1943 transportation requirements, task groups were set up for each of the advisory committees. These will report back at separate committee meetings to take place later this month and early in February.

Non-Woven Cotton Materials May Open New Fields

By use of recently improved non-woven cotton materials, salvaged from waste and impregnated with readily available products such as asphalt to withstand breaking strengths up to 260 pounds, many urgent military and industrial needs may be supplied quickly and cheaply, according to authorities who report considerable progress in this field.

Acceptance of the product presents a paradoxical situation to established textiles, it was pointed out. Under the methods used, expense and time involved in cotton spinning and weaving would be eliminated and, at the same time, weaving looms now hard-pressed to supply substitutes for burlap and other imported baling and bagging needs could be released to fill essential civilian needs.

Since it costs more than paper and less than woven cottons, this nameless "ersatz" product may find a level of use half-way between the two, according to Norman P. Dana, a representative of Utility Products Co. of Huntington, W. Va. He pointed out that although his company had entered the field only a few months ago, a number of new uses were already in view.

Among these, he said, were adaptation for tarpaulins and as wartime replacement for lower grades of canvas heretofore used to cover exposed dumps of ammunition, foodstuffs, etc. It is now being used with satisfactory results as a baling material for textile cloths being shipped from weaving mills to finishing plants, where it has replaced scarce burlap and osnaburghs.

Finer grades of the non-woven material, Mr. Dana explained, have been developed as a by-product of medical gauze output which, when treated with pyroxylin coatings and other compounds to render it gas-impervious, has been adopted for use in gas masks and also as a camouflage item.

In essence, the "ersatz" product derives from cotton waste and card strips salvaged chiefly from bale-opening operations in spinning mills. This is either garnetted or processed on carding machines, then sprayed with starch to achieve cohesion in the form of a web.

The basic sheets thus obtained provide a suitable base for spreading of various coatings. These include asphalt, resins, pitches, gums, etc., choice being influenced by end-use of the product in as much as different results can be achieved by the use of various compounds.

For example, Mr. Dana pointed out, use of asphalt produces a sticky surface which in most cases must be treated further with other compounds to achieve a smooth surface. Book and window-shade cloths and other types, including some treated with the basic chemicals required for cellophane, have been achieved, he added.

American Viscose Declares Dividends

Directors of the American Viscose Corp., at their regular meeting on Jan. 6, declared dividends of \$1.25 per share on the five per cent cumulative preferred stock, and 50 cents per share on the common stock, payable on Feb. 1, 1943, to shareholders of record at the close of business on Jan. 18, 1943.

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Power in the South

(Continued from Page 7)

shadow on this bright horizon—that of Government ownership and operation—and whether or not this shadow materializes into actual danger depends upon the attitude of the American people.

And After the War?

In time of war, it is necessary for the Government to undertake many activities normally reserved for the people. Many of the war plants in the South, as elsewhere in the country, are financed by the Government and will belong to the Government after the war. If the Government should use these properties to compete with privately owned enterprise, the American industrial system would come to an end. What the Government plans to do with its war properties in time of peace is, therefore, a vital question.

This question is particularly acute in the utility industry where the Government has erected a number of plants for war purposes.

In 1917, for example, about seven per cent of the nation's electric power capacity was owned by Government agencies, Federal or local. By the end of 1943, the power capacity owned by these Government agencies will have grown to about 17½ per cent of the total.

The outstanding example of Government operation is the Tennessee Valley Authority. The TVA has now taken its place as one of the largest power projects in the world. It has a capacity of 1,234,260 kilowatts. By June, 1943, this will be more than doubled. Other Government power projects, such as Bonneville and Grand Coulee in the Northwest, may eventually be even greater.

Unfair Competition

On any fair basis, American business management—no matter what the industry—is willing to compete with anybody, including the Government. But it cannot compete against an operation which can subsidize its losses out of the Federal treasury. It cannot compete with a Government agency that is free from the taxes which private operation must pay. Recently, the TVA published a report stating that it and its distributor subcontractors were paying more taxes than were paid by the former owners. But the report talks only about state and local taxes; it ignores the question of Federal taxes. In 1941 the Federal taxes on the entire electric power industry were \$295,000,000. In 1942 it is estimated that under the House bill, these taxes would be \$438,000,000.

Such taxes are not assessed against government agencies, Federal, state or municipal. Clearly, private enterprise cannot compete against this type of privileged operation.

No section of the country today is fighting the war with greater energy and courage than the South. New industries have been started, and new activities have been undertaken. The South hopes to continue many of these after the war. It hopes also that the success of these operations will attract other industries. It is important, therefore, for the South to refuse to let itself become an experimental area for Government operation and control of industry. It must struggle to retain its character as an area where individual ability and enterprise are promised fair rewards.

Announce Promotions and New Technical Personnel at Aridye Corp.

Chester M. Robbins, formerly sales manager of the Southern division of the Aridye Corp., has been appointed vice-president and will hereafter make his headquarters at the home office in Fair Lawn, N. J. Mr. Robbins' function in his new office will be to concentrate upon the presentation of new, fundamental developments in pigment-dyeing and pigment-printing in all territories in which Aridye Corp. is active.



W. B. DePass

William B. DePass, who for a number of years has been working with Mr. Robbins in the Southern territory, is taking over the management of this division, with headquarters at the Rock Hill, S. C., plant. He will be assisted by Clovis Powell. Both have had many years of plant experience before joining the Aridye organization.

The service staff in the Southern division was augmented Jan. 1 by John W. McCalla, who comes to Aridye National Aniline & Chemical Co., where he has been a technician for several years. Prior to that, he had plant experience as dyer and chemist.

Arthur McLean joined the service staff at Fair Lawn Jan. 1. He was associated with Pacific Mills for a number of years and more recently with Cold Spring Bleachery.

Richard M. Johnson has been added to the technical staff. Until recently he was chemist in the dyehouse of Celanese Corp., Cumberland, Md., and brings to Aridye ten years of experience in the printing, dyeing and finishing of acetate fabrics and mixtures.

Arthur Booth, in charge of the textile dyeing and processing department at Paterson Vocational School and for many years a consultant and analyst for textile plants in the New York area, has joined the Development Laboratories at Fair Lawn.

American Aniline Employee Decorated

John H. Powers, formerly an assistant chemist in the laboratory of American Aniline Products, Inc., at Lock Haven, Pa., was recently decorated for gallantry in action during the Battle of Midway.

Sergeant Powers, who has been in the Army for two and one-half years, has been serving continuously in the Pacific area since the outbreak of war.

College Gets 100-Year-Old Loom

ARKADELPHIA, ARK.—John D. Freeman, Nashville, Tenn., executive secretary of the Tennessee Baptist Convention, has presented to the Ouachita College museum a 100-year-old loom made in Sevier County by a descendant of "Uncle" Jimmy Wright, early resident of that part of the state. Mr. Freeman's parents obtained the loom from the Thomas Wright family of Allene, Ark.

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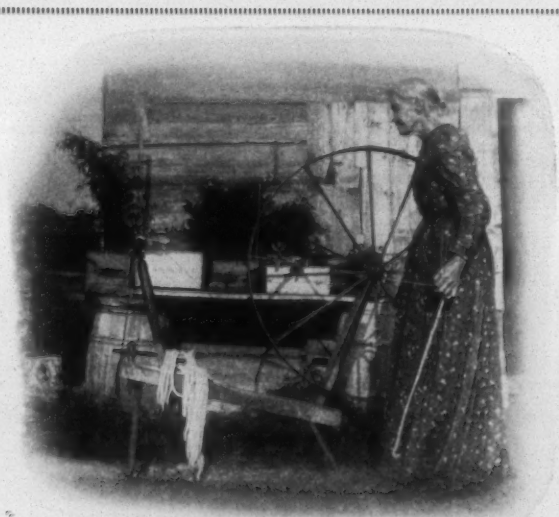
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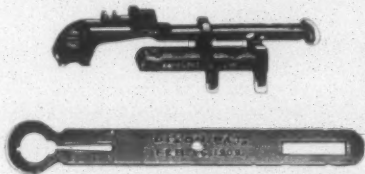
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The Textile Manpower Problem—And What's Being Done About It

(Continued from Page 12)

named by the mill management. Groups of about 12 have been found to be the most practical, and if a mill does not need that many trained it can arrange for joint sessions with other mills.

The program has been used in 64 textile plants in New England, 16 of which are entirely or almost entirely engaged in the manufacture of cotton textiles. Interest in Virginia and North and South Carolina has grown tremendously during the past year.

Mills Using the Program

In the process of converting from the manufacture of civilian needs to war goods, mills found that a good, but not too lengthy, training program was absolutely essential in order to solve the many problems which were facing them daily as a result of this conversion. Among mills which have taken advantage of the program offered are Burlington Mills Corp., Greensboro, N. C.; Roanoke Mills, Patterson Mills and Rosemary Mfg. Co. at Roanoke Rapids, N. C.; Collins & Aikman Corp., Roxboro, N. C.; Kendall Mills, Paw Creek, N. C.; Blue Bell Globe Mfg. Co., Greensboro, N. C.; Ninety-Six (S. C.) Cotton Mills; Ware Shoals (S. C.) Mfg. Co.; Greenwood (S. C.) Cotton Mills; Spartan Mills, Spartanburg, S. C.; Springs Cotton Mills at Fort Mill and Lancaster, S. C.; Marshall Field & Co., Spray, N. C.; and Duplan Corp., Grottoes, Va.

The following are some comments from mill executives concerning the program and its success in the mills:

"I, personally, believe that every textile mill in the country needs the services of your trainers, especially all mills engaged in war production."

"We want to tell you that we feel that you have something unusual in training, and we plan to follow it through so that every overseer who comes in contact with new people or the people we already have in the organization will have a chance to apply this up-to-date method of training new employees."

"We are well pleased with this splendid work."

"All persons taking this training are delighted with the instructions they receive and we feel that it is going to be a real benefit to these people in helping to train others in the plant."

"In order to see the good results of this program, all you need do is merely walk through the plant."

Reducing the Accident Toll

With the invaluable aid of the War Production Fund to Conserve Manpower, which means the voluntary aid of business and industry, the National Safety Council has made a substantial beginning toward reducing the accidental deaths and injuries hamstringing the American war effort. The council is confident that as the fund moves toward its \$5,000,000 goal its nationwide system of curbs on the American wartime accident-experience will continue to grow correspondingly in effectiveness and scope.

The council is co-operating in important military-industrial areas with the War Department in organizing car pooling, staggered hours and traffic control systems.

The safety engineers of the council staff are occupied with providing solutions to a never-ending stream of problems arising in war industry.

Consultant relations with the War and Navy Departments, the War Production Board, the War Manpower Commission and the Department of Labor have been established to assist in the instruction of the tens of thousands of safety-trained personnel needed in war plants. Similar relations have been set up with the Office of Education and of the Office of Defense Transportation.

Under-Secretary of Navy Forrestal, in coming out strongly for the campaign against accidents, called for more teamwork in the community to ensure maximum support of the fighting forces. "Our first job is to make weapons," Mr. Forrestal said. "Any impediment to their manufacture in this time of national crisis comes strictly under the heading of criminal negligence bordering on sabotage."

Use of Manning Tables

A system of planning for and working out the labor-supply problem in textile mills engaged in at least 75 per cent war production is being offered by the War Manpower Commission. The system consists of manning tables, which are distributed on request by regional offices of the WMC.

The manning tables are forms, which, when filled out, provide a realistic inventory of the personnel and job classifications in each mill. They determine how efficiently a plant is utilizing its working force, how adequate are its programs for training, upgrading and promoting employees, and provide a basis for planning improvements. They furnish each employer, in many cases for the first time, with complete information as to the number of employees who are subject to induction. A supplementary withdrawal and replacement schedule offers guidance in planning replacements so that production will not suffer as employees enter military service.

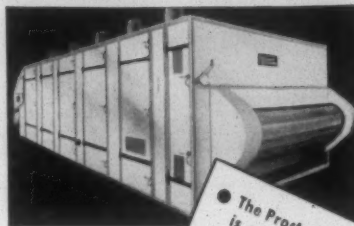
The manning tables, which may seem technical and involved at first glance, actually are neither. They are forms which are relatively simple to fill out, and which offer a sensible method of evaluating the personnel and production problems of each plant and the best method of meeting them.

The employer must expend some time and effort in gathering the required information, but will in return receive information which will enable him to plan adequately to meet his labor needs of the future. The Government will, in turn, receive information which will furnish the basis for the orderly withdrawal of worker, who must, under Selective Service, be released to the armed services.

Should Correct Error in Wage Table

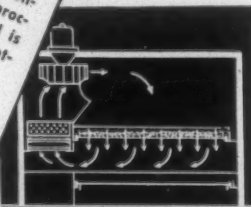
Several readers have called attention to a typographical error in the table of constants for computing overtime wages in the Nov. 15 TEXTILE BULLETIN. The last overtime constant in the table should be .1667, not .1167. This correction should be made immediately by any firm using the table. Another error appeared in the second example listed, where .0833 times \$8.32 was given as 60 cents. The last figure should be 69 cents.

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Weight Now Factor in Fine Cotton Grey Goods Ceilings

Ceiling prices supplied in the fine cotton grey goods schedule are made applicable only to the designated weights of the thread counts listed as the result of Office of Price Administration action Jan. 5, which, in effect reverses an interpretation of the schedule issued to one producer recently.

To effectuate this result, an Amendment, No. 8 to Revised Price Schedule 11—Fine Cotton Grey Goods—specifies the weights applicable to each of the 29 types and constructions of cloth for which the width and thread count are enumerated. These cover certain constructions of combed broadcloth, lawn, dimity, voile, pique, pongee and marquisette. The amendment is made retroactive to Feb. 11, 1942.

OPA previously had taken the position that each maximum price in Schedule 11 applied to all weights of the types and constructions, which were described only by reference to their width and thread count. The weights originally were omitted from the schedule in order that its coverage might not be confined to fabrics of particular weights.

A survey conducted by OPA shows that all fine cotton goods producers in the industry had interpreted the schedule to apply only to fabrics of "universal" weights, subject to customary trade tolerances. In view of this and in fairness to the industry, OPA now recedes from its position and is modifying Schedule 11 to apply only to the fabrics of such weights, which are now specifically listed.

As has previously been announced, Schedule 11 will shortly be reissued with expanded coverage to include numerous constructions presently subject to the General Price Regulation and Regulation 157—Sales and Fabrication of Textiles, Apparel and Related Articles for Military Purposes. The revision will be so drafted, OPA said, as to preclude any possible misunderstanding as to the weights covered.

Du Pont Gets Safety Award

A special award of honor "for distinguished service to safety" was presented Jan. 4 to E. I. du Pont de Nemours & Co. by the National Safety Council.

The award was announced by Colonel John Stilwell, president of the council, and head of a nationwide campaign to "save manpower for warpower." It was accepted by Walter S. Carpenter, Jr., president of the du Pont Co. The ceremony took place on the Cavalcade of America radio program.

In presenting the award, Colonel Stilwell said that the du Pont Co. had "one of the finest safety records ever made by any industrial organization in the history of the United States."

Mr. Carpenter, in accepting the award, paid tribute to the company's employees for making its receipt possible.

"I accept this award on behalf of du Pont men and women everywhere," he said, "and with deep personal satisfaction. Over many years the du Pont Co. has emphasized the prevention of accidents. Rules and practices have been formulated to this end by the management, but it is to our employees—to the day-by-day effort of each one of them—that credit for this award is due."

Better Yarns Being Made From Treated Cottons

AUSTIN, TEX.—A new cotton treatment has been developed at the University of Texas that may make possible manufacture of finer yarns from medium grades of cotton.

The friction discovery also promises to relieve a bottleneck in fine cotton needed by the military forces to make strong, lightweight fabrics and good rope despite a jute shortage.

The friction was one of those accidents where a scientist looking for one thing found something else. It happened in the University Bureau of Industrial Chemistry. Three years ago three young men in the bureau started looking for new uses of Texas cotton. The chemists are Dr. Simon Williams, who is associate director, Dr. Sydney Coppick and Jack Towery.

They began by trying to convert Texas cotton into a substitute for some cotton with wool-like properties imported from the Far East for making blankets and nap goods. In their chemical experiments they came across a process which increased the friction between cotton fibers. That discovery completely changed their objective.

In making cotton thread, the strength depends on getting the individual fibers, which are about an inch long, and a few thousandths of an inch in diameter, to lie parallel. Friction between parallel fibers is the main force which holds them together and gives strength to the thread.

Long fibers, an inch or more in length, have made finer, stronger yarns than shorter fibers. The friction discovery meant that the medium or short lengths of cotton could be used for some of the goods previously confined to long-fiber cotton.

The bulk of American cotton is not long fiber, however. That gave the friction discovery great potential industrial value. It promised better land conservation, since the medium cotton grows on soil, much of which does not do as well in any other important crop.

For two years the Texans have experimented with the friction produced by chemistry. They devised a low-cost chemical bath which can be operated without a chemist. They sent their chemically treated product to mills where weaving showed that it could be handled on the same machinery and in every other way exactly like other cotton. The only difference was that the treated cotton produced superior goods for its class.

The University Research Foundation has applied for patents. A small cotton spinning mill has been set up at the University. Cotton from the same bale, half of it chemically treated, the other half untreated, will be spun into thread. The parallel lots of thread will go to standard mills to be woven. This will furnish a gauge of the amount of profit for farmer, cotton mill and consumer in the new chemical bath.

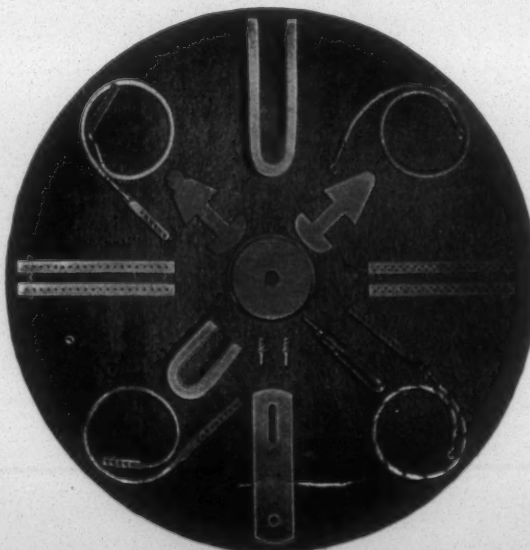
Microscopes fail to reveal the reason for the increased friction. There is not the slightest change in appearance of the fibers. The best guess is that there is added roughness in the surface of the fibers. All tests show no change in quality of the cotton nor in ability to take dyes. Indications are for some improvements in quality in addition to the added friction.

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Following are the addresses of Southern plants, warehouses, offices, and representatives of manufacturers of textile equipment and supplies who advertise regularly in *TEXTILE BULLETIN*. We realize that operating executives are frequently in urgent need of information, service, equipment, parts and materials, and believe this guide will prove of real value to our subscribers.

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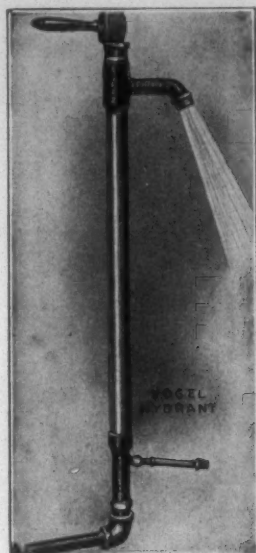
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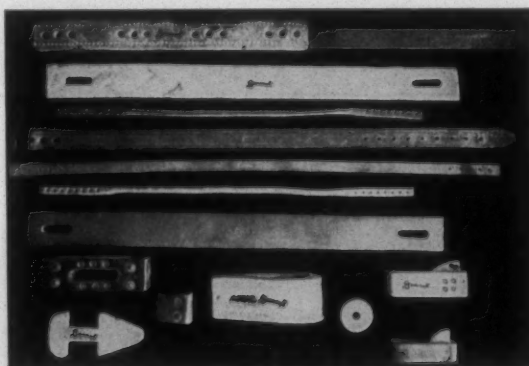


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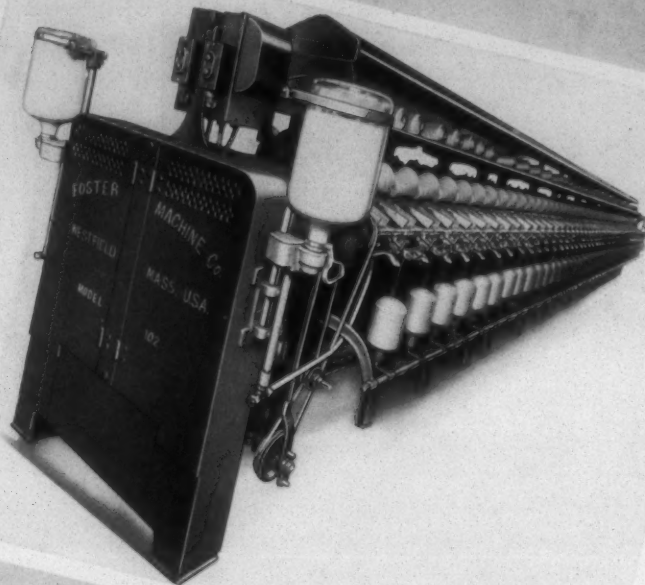
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